DOCUMENT RESUME

ED 406 194 SE 059 896

TITLE Energy Education Resources: Kindergarten through 12th

Grade.

INSTITUTION Energy Information Administration (DOE), Washington,

DC.

REPORT NO DOE/EIA-0546 (96)

PUB DATE Mar 97 NOTE 132p.

AVAILABLE FROM National Energy Information Center, EI-30, Energy

Information Administration, Room 1F-048 Forrestal Bldg., 1000 Independence Avenue, S.W., Washington, DC

20585 (free).

PUB TYPE Guides - Classroom Use - Teaching Guides (For

Teacher) (052) -- Reference Materials -

Directories/Catalogs (132)

EDRS PRICE MF01/PC06 Plus Postage.

DESCRIPTORS *Educational Resources; Elementary Secondary

Education; *Energy Education; Higher Education;

Internet

ABSTRACT

This guide is published by the National Energy Information Center (NEIC), a service of the Energy Information Administration (EIA), with the goal of providing students, educators, and other information users a list of generally available free or low-cost energy-related educational materials. Each entry includes the address, telephone number, and description of the organization and the energy-related materials available. Many of the entries also include Internet (Web) and electronic mail (e-mail) addresses. (JRH)





Kindergarten through

12th Grade

Energy Information Administration National Energy Information Center U.S. Department of Energy Washington, DC 20585

U.S. DEPARTMENT OF EDUCATION OF EDUCATION OF EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as sector of the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

March 1997





Copies of this publication are available free of charge from:

National Energy Information Center, EI-30 Energy Information Administration Forrestal Building, Room 1F-048 Washington, DC 20585 (202) 586-8800 TTY: For people who are deaf or hard of hearing: (202) 586-1181 9 a.m. to 5 p.m., eastern time, M-F

Information is also now available through the following:

Internet E-Mail: infoctr@eia.doe.gov World Wide Web Site: http://www.eia.doe.gov

FTP Site: ftp://ftp.eia.doe.gov

Released for Printing: February 28, 1997



Printed with soy ink on recycled paper



PREFACE

Energy Education Resources: Kindergarten Through 12th Grade is published by the National Energy Information Center (NEIC), a service of the Energy Information Administration (EIA), to provide students, educators, and other information users, a list of generally available free or low-cost energy-related educational materials.

Each entry includes the address, telephone number, and description of the organization and the energy-related materials available. Many of the entries also include Internet (Web) and electronic mail (E-Mail) addresses. Each entry is followed by a number, which is referenced in the subject index in the back of this book.

Some of the organizations represented in this list take policy positions on certain energy issues and express them even in educational materials. Because EIA is the independent statistical and analytical agency within the U.S. Department of Energy (DOE), it does not advocate any policy position of DOE or any other organization. EIA has completed this list solely to aid educators and students in locating materials.

Paula Altman of NEIC, updates and compiles *Energy Education Resources* once a year. To include a new entry or to obtain a free copy of this list, contact NEIC at the following address:

National Energy Information Center, EI-30 Energy Information Administration Room 1F-048, Forrestal Building 1000 Independence Avenue, S.W. Washington, DC 20585 (202) 586-8800 TTY: For people who are deaf or hard of hearing: (202) 586-1181 9 a.m. to 5 p.m., eastern time, M-F

This publication is available on EIA's World Wide Web site: http://www.eia.doe.gov.



CONTENTS

	1	age
1	Air & Waste Management Association (A&WMA)	. 1
2	The Alliance to Save Energy	. 2
3	The Aluminum Association, Inc.	. 2
4	American Association for Vocational Instructional Materials	. 2
5	American Chemical Society	. 3
6	American Coal Foundation	. 3
7	American Council for an Energy-Efficient Economy (ACEEE)	. 4
8	American Forest Foundation	. 4
9	American Geological Institute	5
10	American Nuclear Society	6
11	American Petroleum Institute	7
12	American Plastics Council	
13	American Public Power Association	
14	American Solar Energy Society	9
15	American Water Works Association	9
16	American Wind Energy Association	. 10
17	Apple Computer, Inc	. 11
18	Arizona Department of Commerce Energy Office	. 12
19	The Aseptic Packaging Council	. 12
20	The Bakken Library and Museum	. 12
21	Baltimore Gas and Electric Company (BGE)	. 13
22	BP America	. 14
23	Bronx Zoo/Wildlife Conservation Park	. 15
24	Bullfrog Films	. 16
25	California Energy Commission	. 16
26	California Foundation for Agriculture in the Classroom	. 17
27	The Center for Energy and Economic Development (CEED)	. 18
28	Center for Renewable Energy and Sustainable Technology (CREST) .	. 18
29	Channing L. Bete Publishing Co., Inc.	. 19
30	Charles Edison Fund	. 20
31	The Chlorine Chemistry Council (CCC)	
32	City Public Service (CPS)	. 21
33	City Utilities of Springfield	. 21
34	Cobblestone Publishing	. 22
35		. 22
^/	Consumer Aerosol Products Council	

ER	6	30			
01	tional Corn Growers Association				
	National Association of Conservation Districts (NACD)	40			
80	National Arbor Day Foundation				
79	National Aeronautics and Space Administration (NASA)				
78	Minnesota Department of Public Service				
77 77	Midwest Renewable Energy Association				
75 76	The Learning Works				
7 4 75	Kissimmee Utility Authority (KUA)				
73 74	Kids For A Clean Environment (Kids F.A.C.E.)				
73	Keep America Beautiful, Inc.				
72	,				
70 71	, ,				
70					
69					
68	Indiana Department of Education				
66 67	Independent Petroleum Association of America				
65 66	Illinois Department of Commerce and Community Affairs				
64	Houston Lighting & Power Company				
63	Hawaiian Electric Company, Inc.				
62	GPU Energy				
61	Global Issues Resource Center				
60	Geothermal Education Office				
59	Tronges Octorices Equedition Canadator				
58					
57	= = = = = = = = = = = = = = = = = = =				
56	Florida Solar Energy Center (FSEC)				
55	Florida Power & Light Company	35			
54	Florida Energy Office	34			
<u>53</u>	Flexible Packaging Educational Foundation	34			
52	Exxon Company, U.S.A.	33			
51	EV Media				
50	Environmental Hazards Management Institute (EHMI)				
49	Enterprise for Education, Inc.				
48	Energy Source Education Council				
47	Educational Development Specialists				
46	Edison Plaza Museum				
45	Edison Electric Institute (EEI)				
44					
43	Earth Foundation				
42					
41	Disney Educational Productions				
40	Denver Earth Science Project				
38 39	Dayton Power & Light Company				
~=					

83	National Cotton Council of America	50
84	National Energy Education Development Project (NEED)	51
85	National Energy Foundation (NEF)	52
86	National Geographic Society	53
87	The National Hydropower Association	54
88	National Mining Association	54
89	National Network of Energy and Environmental	
	Education Professionals	55
90	National Propane Gas Association	55
91	National Rural Electric Cooperative Association	56
92	National Science Foundation	56
93	National Science Resources Center (NSRC)	57
94	National Science Teachers Association	58
95	National Wildlife Federation	58
96	The Natural Gas Vehicle Coalition	59
97	New York State Geological Survey	59
98	The NoodleHead Network	60
99	Northeast Utilities	60
100	Northern Indiana Public Service Company	62
101	Northern States Power Company	62
102	Nuclear Energy Institute	63
103	Nuclear Information and Resource Service	63
104	4 OG&E Electric Services	64
105	5 Ohio Oil & Gas Association	64
106	6 Oklahoma Energy Resources Board	65
107	7 Omaha Public Power District	65
108	3 Pacific Gas & Electric Company	66
109	9 Pennsylvania Power & Light Co	67
110) Plastic Bag Association	67
111	1 Polystyrene Packaging Council	65
112	2 Procter & Gamble	65
113	3 The Radon Group, Ltd	65
114	4 Railroad Commission of Texas	7U
115	5 Renewable Fuels Association	/ 1
110	6 Renew America	74
117	7 Safe Energy Communication Council	/ /
118	8 Science Screen Report	/:
119	9 Science Service	/ 3
120	0 Shell Oil Company	/4
12	1 Simon and Schuster Children's Publishing Division	/ 4
12:	2 SME	/: ידי
12	3 Smith College	
12	4 Solar Energy Industries Association	· · · · · · · / ·
12	5 Solar Now	۰۰۰۰۰۰ /۱
12	6 Steel Recycling Institute	· · · · · · · / ·
\mathbb{R}^{3}	he Sugar Association, Inc.	/
_1		

128 Troll School and Library L.L.C	. 78
129 Union of Concerned Scientists	. 78
130 University of California-Los Angeles	. 79
131 University of Florida	ደበ
132 University of Illinois at Urbana-Champaign	80
133 University of Maryland-College Park	81
134 U.S. Consumer Information Center	81
135 U.S. Department of Agriculture	82
136 U.S. Department of Commerce	82
	. 02
U.S. Department of Education	
137 ERIC Clearinghouse for Science, Mathematics, and Environmental	
Education	83
138 Office of Educational Research and Improvement (OERI)	
100 Office of Educational Research and Improvement (OEM)	. 04
U.S. Department of Energy	
139 Argonne National Laboratory	0=
140 Biofuels Feedstock Development Program	. 00
141 Bonneville Power Administration	. 00
142 Carbon Dioxide Information Analysis Center (CDIAC)	. 80
142 Cloop Cities Helling	. 87
144 Energy Efficiency and Benaviola Forest Classical (EDEC)	. 88
144 Energy Efficiency and Renewable Energy Clearinghouse (EREC)	. 88
145 Federal Energy Technology Center - Morgantown	. 89
146 Federal Energy Technology Center - Pittsburgh	. 89
147 Los Alamos National Laboratory	. 90
148 National Alternative Fuels Hotline	
149 National Energy Information Center (NEIC)	
150 National Low Level Waste Management Program	. 92
151 National Renewable Energy Laboratory	. 93
152 Office of Civilian Radioactive Waste Management	
153 Office of Fossil Energy	
154 Office of Nuclear Energy, Science and Technology	. 94
155 Office of Scientific and Technical Information	. 95
156 Southwestern Power Administration	. 95
157 Western Area Power Administration	. 96
U.S. Department of the Interior	
158 Bureau of Land Management (BLM)	. 96
159 Minerals Management Service (MMS)	. 97
•	
160 U.S. Environmental Protection Agency (EPA)	
161 Videodiscovery, Inc.	. 98
162 Water Environment Federation	. 99
163 Waverly Light and Power	100
164 Westinghouse Electric Corporation	100
consin Public Service Corp.	101
ERIC	-
THE	

SUBJECT INDEX	 103



Air & Waste Management Association (A&WMA)

One Gateway Center, Third Floor Pittsburgh, PA 15222

(412) 232-3444

Fax: (412) 232-3450

E-Mail: info@awma.org

Web: http://www.awma.org

Provides educational materials students in kindergarten through grade 12. Materials are designed to improve the environmental literacy of students and educators and introduce them to actions that they can take to reduce waste, conserve energy, and develop pollution prevention plans. Materials include fact sheets and information books on such topics as air pollution, prevention, recycling, pollution hazardous waste, landfills, and others. A&WMA also produces Environmental Resource Guides (ERG's) on air quality nonpoint source pollution prevention, which focuses on water quality and runoffs. The ERG's are supplementary curricula with a handsinterdisciplinary approach environmental education. We encourage A&WMA members and other interested parties to sponsor local teacher-training workshops. The workshops provide teachers an opportunity to participate in ERG activities and create an ongoing dialogue between environmental professionals and the educational community. Contact A&WMA headquarters to find out about teacher-training opportunities in your area or to order public education 1 materials.

Founded in 1907, A&WMA is a nonprofit, technical, and educational organization with over 16,000 members in 65 countries. This worldwide network represents many plines: physical and social sciences, health, neering, law and management. It serves its members and the public by promoting environmental responsibility; provides technical and managerial leadership in the areas of pollution control, environmental management, and waste processing and control.



A nonprofit coalition of

business, government, environmental, and consumer

The Alliance to Save Energy 1200 18th Street, N.W., Suite 900 Washington, DC 20036 (202) 857-0666 1-(800) 376-6216 Fax: (202) 331-9588

E-Mail: info@ase.org

Web: http://www.ase.org

Consumers who call the toll-free number receive a poster with energy-saving tips and the opportunity for a free informational kit with information from DOE, the Environmental Protection Agency, product manufacturers, and other organizations.

.

leaders.

The Aluminum Association, Inc. 900 19th Street, N.W. Washington, DC 20006-2168 (202) 862-5100 Fax: (202) 862-5164 Web: http://www.aluminum.org

Provides educational materials on recycling for use in kindergarten through grade 12. There are two educational videos available—"Call Me Can" and "Aluminum Recycling: Your Next Assignment." The videos can be borrowed on a free-loan basis by calling Modern Talking Picture Service (1-800-243-6877). Free catalogs are also available.

A trade association representing the U.S. aluminum industry. Serves as principal source of information on aluminum and the industry.

American Association for Vocational Instructional Materials 220 Smithonia Road Winterville, GA 30683 (706) 742-5355 Fax: (706) 742-7005

Provides vocational instructional materials on electricity and electrical energy. Included are publications, computer software, and videos for reasonable fees. A free catalog is also able upon request. Publications

A nonprofit developer, publisher, and distributor of materials for vocational education. available include Understanding Electricity and Electrical Terms; Electrical Wiring; How Electric Motors Start and Run; Fuels and Lubricants; Electric Motors; Home Electrical Repair; and Electrical Controls. 4

American Chemical Society 1155 16th Street, N.W. Washington, DC 20036 (202) 872-4590 Fax: (202) 833-7732

E-Mail: education@acs.org

Web: http://www.chemcenter.org

Publishes educational materials for use in grades 4 through 12. WonderScience is an exciting monthly hands-on science activities magazine for middle school students (back issues are available); award-winning ChemMatters, an magazine for high school students, relates chemistry to everyday life (published quarterly, back issues are available); and ChemCom, also for high school students, is a chemistry textbook that combines an emphasis on the role of chemistry in everyone's life with basic chemical knowledge. All three products deal with such energy-related topics as electricity, recycling, nuclear energy, and the environment. A free Teaching Resources Catalog is available upon request.

The world's largest scientific society, with a membership of nearly 150,000 chemists and chemical engineers.

American Coal Foundation 1130 17th Street, N.W., Suite 220 Washington, DC 20036-4604 (202) 466-8630 Fax: (202) 466-8632

Provides materials on coal production, distribution, usage, research, and the environment. Some of the materials are available in classroom sets free of charge. Also available free of charge is a coal kit containing samples of peat, lignite, bituus coal, and anthracite, and a brief iption of the formation and ent types of coal.

A nonprofit educational organization supported by a coalition of coal producers, electric utilities, railroads, equipment suppliers, sellers, and the labor union.

American Council for an Energy-Efficient Economy (ACEEE)

1001 Connecticut Avenue, N.W., #801

Washington, DC 20036 (202) 429-8873

Fax: (202) 429-2248

E-Mail: aceee@ix.netcom.com Web: http://crest.org.aceee

Publishes a variety of books, reports, consumer guides, and fact sheets. Material covers energy use, efficiency, and related environmental issues in buildings, industry, and transportation. ACEEE's books and reports are written primarily for adults and concern energyefficient technologies and policies. In addition, the Consumer Guide to Home Energy Savings is a popular illustrated handbook for consumers, and is a suitable teaching resource for grades 8 through 12. These materials are available for a fee and are described in a free catalog. ACEEE also provides fact sheets, free of charge, on energy efficient appliances, energy and the environment, guidelines for home conservation.

American Forest Foundation

Project Learning Tree 1111 19th Street, N.W., Suite 780 Washington, DC 20036 (202) 463-2462

Fax: (202) 463-2461

PLT is co-sponsored by the American Forest Foundation and the Council for Environmental Education. PLT's newly revised curriculum guide, Project Learning Tree: Environmental Education Pre-kindergarten through Grade 8 Activity Guide, focuses on the total environment: land, air, and water. It is local, national, and global in scope. The new curriculum underscores PLT's primary goal — to help children learn how to think about nvironment, not what to think about revironment. The curriculum remains

An independent, nonprofit organization dedicated to advancing energy efficiency as a means of promoting both environmental protection and economic prosperity.

Develops, funds, and administers programs that encourage the long-term stewardship of our natural resources. The Foundation's core programs are Project Learning Tree (PLT) and American Tree Farm System.

easily adaptable to many settings from the classroom to youth organizations, museums, nature centers, and scout troops. Nearly 100 activities are offered in a storyline technique covering the themes of diversity, interrelationships, systems, structure and scale, and patterns Central to the new of change. curriculum emphasis is an constructivist learning theory and whole language teaching strategies. information, Background authentic assessment opportunities, an extensive bibliography, and a cross reference index are also included. A new curriculum made up of individual thematic modules, for use in grades 9 through 12, is near completion. PLT curricular materials are available only through workshops. Contact PLT for the name of the program coordinator in your State. 8

American Geological Institute 4220 King Street Alexandria, VA 22302-1502 (703) 379-2480 Fax: (703) 379-7563 E-Mail: ehr@agiweb.org Web: http://www.agiweb.org/

Distributes information on earth science education through several mechanisms, including publications (textbooks, monographs, a monthly magazine entitled Geotimes, brochures), public inquiries, outreach programs (workshops and presentations), compact discs and a laser Careers in the Geosciences (1-10 copies free) is one of the publications available. Compiled and distributed since 1990, the Earth Science Education Resource Directory provides information on earth science educational materials that are available from nonprofit organizations. The list is updated annually and is available in hard copy and through electronic mail at the ss above. AGI's goals are to KICice and promote the geosciences fine transfer improved public information, Established in 1948, the American Geological Institute (AGI) is a nonprofit federation of 30 member organizations representing more than 80,000 geologists, geophysicists, and other earth scientists.

expanded professional services to the geoscience community, and increased earth science educational programs at the college and precollege levels. For additional information, write to AGI Publications Center, P.O. Box 205, Annapolis Junction, MD 20701, (301) 953-1744 or fax at (301) 953-2838.

American Nuclear Society
Outreach Department
555 North Kensington Avenue
LaGrange Park, IL 60525
(708) 579-8251
Fax: (708) 352-0499

E-Mail: outreach@ans.org Web: http://www.ans.org

Offers free publications (single copies) on nuclear energy and uses of the atom. Available materials include Nuclear Energy Facts Q&A, Nuclear Technology Creates Careers, Personal Radiation Dose Chart, and a simulated nuclear fuel Science and social studies materials use curricula for kindergarten through grade 12 may be borrowed or purchased. A free catalog is available upon request by mail or electronic mail at outreach@ans.org. Teachers may sign up for the free newsletter re-actions, which contains articles on uses of the atom in everyday life and-in each issue-an "activity card" with a project for classroom use. Shorter workshops and sessions are held throughout the exhibits, year at conferences, in-service training, and by invitation. 10 A nonprofit scientific and educational organization of professionals in the field of nuclear science and technology.



American Petroleum Institute Public Relations Department 1220 L Street, N.W. Washington, DC 20005 (202) 682-8118 Web: http://www.api.org

Supplies educational materials on the petroleum industry to teachers at no charge. Available materials include a video for middle school students that illustrates with pop music and dance the often invisible role that petroleum products play in our lives. Entitled "Fuel-Less, You Can't Be Cool Without Fuel," is also being distributred by the National Science Teachers Association. One per classroom. The Ecosystem of Oil explains the role of petroleum throughout history, emphasizing the petroleum industry's commitment in safeguarding environmental and wildlife resources. Classroom sets of up to 35 are Running on Oil is a booklet available. which includes an eight-page feature article on oil; a large colorful poster for and classroom classroom display; activities demonstrating the scientific properties and role of oil in modern life. One per classroom. Also available in classroom sets of up to 35 is an oil barrelshaped card entitled Facts About Oil, which contains oil industry facts including the number of people who work in the industry, used motor oil collection, gasoline taxes paid, and petroleum products and petrochemicals made from a barrel of crude oil.

A national trade association that encompasses all branches of the petroleum industry.



American Plastics Council 1801 K Street, N.W., Suite 701L Washington, DC 20006 (202) 974-5379 1-(800) 2-HELP-90 Fax: (202) 296-7119

Web: http://www.plasticsresource.com

APC, in conjunction with the National Middle Level Science Teachers Association, has created a unique handson kit, designed to help middle level science classes explore the world of plastics. Included in "Hands On Plastics: A Scientific Investigation Kit" are written background information, recycled plastic resin samples, and learning cycle lesson plans to teach your class about chemical structures, identification codes, and recycling. The kit is available for a nominal fee. Additional educational materials include Plastics in Perspective, a booklet that answers the most frequently asked questions about plastics in the environment, and an 11-minute video entitled "The Busy, Busy Planet." The video addresses issues such as source efficiency reduction, energy recycling, and illustrates the many ways plastics benefit our lives and our environment. Single copies of each of these materials are free to educators, and can be obtained by calling the hotline or through the Web site above. 12

American Public Power Association 2301 M Street, N.W., Suite 300 Washington, DC 20037 (202) 467-2900

Provides various pamphlets, including The Benefits of Public Power; Profile of Power; Careers in Public Power; and All About Electricity and 10 Ways Kids Can Save It. Offers a Teaching Unit on Electromagnetic Waves, which was developed by the Los Angeles Department of Water Power for junior high and senior RIC school students. Also available are

The American **Plastics** Council (APC) is the major national trade association representing the U.S. plastics industry on resource conservation APC works on issues. overall behalf of the plastics industry to enhance the integrity of plastics, focusing on management-related environmental issues. Its mission is to ensure that plastics are a preferred material in a more environmentally conscious world.

A service organization for not-for-profit communityowned electric utilities two videos, "Simple Things You Can Do to Save Energy" and "How to Make Great Videos About Saving Energy." The videos were prepared by the Burlington (Vermont) Electric Department through the American Public Power Association's DEED (Demonstration of Energy Efficient Developments) program. Publications and videos are offered for a nominal fee. A free catalog is available.

American Solar Energy Society 2400 Central Avenue, Suite G-1 Boulder, CO 80301 (303) 443-3130 Fax: (303) 443-3212

E-Mail: ases@ases.org

Web: http://www.ases.org/solar

Offers sample copies of its magazine Solar Today and publication catalog. Has one science project book, Elementary and Secondary Science Projects in Renewable Energy and Energy Efficiency, available for a fee.

American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 (303) 794-7711 (303) 347-6140 (Youth Education) Fax: (303) 794-7310 E-Mail: bmuslim@awwa.org Web: http://www.awwa.org

Provides educational materials designed to teach young people about water treatment, distribution, and conservation. Materials include activity books, teacher's guides, comic style books, computer software, videos, bookcovers, and novelty items. A free Youth Education Sample Packet and other educational materials may be ordered

A national membership association dedicated to advancing the use of solar energy.

An international, nonprofit, scientific, and educational organization of professionals associated with the public drinking water industry, including utilities, manufacturers, consultants, researchers, and educators.



directly from AWWA headquarters in Denver. The packet includes an AWWA Youth Education Catalog. To place orders, telephone the AWWA Bookstore at 1-800-926-7337 or access it on the Web site above.

American Wind Energy Association 122 C Street, N.W., Fourth Floor Washington, DC 20001 (202) 383-2500

Fax: (202) 383-2505

E-Mail: windmail@mcimail.com Web: http://www.igc.apc.org/awea/

Offers an Educator's Packet on wind energy including: the current Wind Energy Status Report, which outlines the domestic and international growth of the wind industry; the Basic Facts About Wind Energy, which discusses the scale of wind projects as well as economic development; and a Wind Energy Information Guide, a compilation of further sources to contact for information about wind energy. Elementary (grades 4 through 8) and secondary (grades 7 through 12) fact sheets and a simple experiment are also provided for use in the classroom. This packet is available free upon request. Other educational materials like videos and posters are available for a fee through the AWEA publications catalog.

The American Wind Energy Association (AWEA) represents wind energy as a technology that is economically and technically viable today.



Apple Computer, Inc.
1 Infinite Loop
Cupertino, CA 95014
1-(800) 800-2775
E-Mail: ewhite@apple.com
Web: http://www.apple.com

The mission of the Education Division of Apple Computer is to provide advanced technology for learning "anytime, anyplace, and anywhere" for students and educators. The Macintosh computer systems are specifically designed with input from educators and continue to be the computer of choice of most schools. In 1996, Apple continued this tradition with the introduction of the eMate 300, which is a low cost, portable data collection device.

During 1997 Apple will introduce a collection of software solutions that will allow teachers and students to conduct investigations into environmental issues, analyze their findings, and publish the results using either a word processor or a web page builder. These solutions will be part of the Apple Education Series (AES), a suite of hardware and software products that include CD's, writing and publishing tools, productivity tools, and curriculum simulations. Apple has also produced a set of science handbooks that are distributed by the National Science Teachers Association at 1-800-722-NSTA. Information about any Apple product is available on the Internet or by calling the 17 above number.

Apple develops, manufactures, and markets personal computers for use in education, business, science, engineering, and government.



Arizona Department of Commerce Energy Office

3800 N. Central, Suite 1200

Phoenix, AZ 85012 (602) 280-1402

Fax: (602) 280-1445

E-Mail: jima@ep.state.az.us E-Mail: Cheryll@ep.state.az.us

Provides the following materials and services for primary and secondary schools: Bright Ideas (single-topic publications covering energy and the environment, recycling, solar cooking, and photovoltaics); Energy Patrol: Turn Off Those Lights and Marketing Energy Patrol.

A DOE-funded program that emphasizes an energy efficiency curriculum for students in kindergarten through grade 12.

The Aseptic Packaging Council P.O. Box 3794 Washington, DC 20007 1-(800) 277-8088

Offers free educational materials on recycling issues for teachers and students. Waste Wise: Concepts in Waste Management, a teacher's discussion guide, can be adapted for particular classes from kindergarten through grade 12. We also have available a poster, What's New In Recycling, which complements the teaching guide. A general information brochure may also be ordered.

A trade association representing the U.S. manufacturers of drink boxes. The APC's primary mission is to inform the American public about the product benefits and environmental attributes of aseptic packaging.

The Bakken Library and Museum 3537 Zenith Avenue South Minneapolis, MN 55416 (612) 927-6508 Fax: (612) 927-7265 Web: http://www.bakkenmuseum.org

The Bakken has developed a book and kit to teach students how scientists of the 18th century succeeded in developing basis for all we know about RIC rostatics, equipped only with their

A nonprofit educational organization with library and museum collections documenting the history of electromagnetism and its uses in the life sciences.

powers of observation and simple apparatus. The kit has easy-to-assemble apparatus commonly found in an 18thcentury electrical laboratory, a 22-minute videotape, and a 100-page curriculum manual. The manual has instructions for experiments, demonstrations and methods for adapting the experiments for students from the elementary grades through high school, and gives the historical context in which discoveries were made. Designed and tested by The Bakken Library and Museum, this kit offers an excellent introduction to teaching basic electricity and the history of science.

By using this inquiry-based approach, students gain deeper insight into the principles of electrostatics. The development of the kit was cofunded by the National Science Foundation. This kit is available for sale from The Bakken. The video and curriculum manual are available separately. Write or fax to obtain The Bakken's current list of other educational resources for sale or to receive our free newsletters.

Baltimore Gas and Electric Company (BGE)

Educational Services P.O. Box 1475 Baltimore, MD 21203-1475 (410) 234-7484 Fax: (410) 234-7471

Provides educational services free of charge to schools in BGE's service area. Services include classroom programs, career programs, resources, certified workshops for educators; and videos, power plant tours, and classroom literature for students in kindergarten through grade 12. A free Educational Resources catalog is available upon est.

An investor-owned utility serving Baltimore City and all, or parts of, nine central Maryland counties.



BP America Corporate Communications 200 Public Square (10-L) Cleveland, OH 44114-2375 (216) 586-3794

Fax: (216) 586-6957

E-Mail: kochtj@regctr02.usaclv.msnet.

bp.com

Science Across America makes it possible for students to exchange their scientific work with others throughout the United States and around the world. The program includes eight teaching modules designed for students in grades 7 through 12. The units deal with those are of international issues which environmental interest (e.g., energy and drinking water quality) and are common to science courses internationally. There is a fee, which includes lifetime registration on a worldwide database of participating schools. For more information, write to the address above. BP Statistical Review of World Energy, a booklet containing information on world energy supplies and demand, includes data on oil, gas, coal, nuclear, and hydro in terms of reserves, production, and consumption for a 10-year period before the current year. Also available is Facts, BP's annual report on health, safety and the environment. These publications are free to teachers. Contact above address. Also available is the BP Educational Resources Catalogue, which offers a full range of school resource materials. Some of the items in the catalogue are available for a fee.

The wholly owned U.S. subsidiary of one of the world's largest national petroleum and petrochemical groups.



Bronx Zoo/Wildlife Conservation Park Education Department 2300 Southern Boulevard Bronx, NY 10460 1-(800) 937-5131 Fax: (718) 733-4460

Web: http://www.wcs.org

Offers Voyage From the Sun, a 20-lesson classroom science module for grades 4 through 9. Developed with funding from the U.S. Department of Energy, Voyage is designed to introduce students to the major way in which energy is important to wildlife and natural habitats. It encourages students to explore the story of Earth's energy—its solar origins, how it is incorporated into living systems through photosynthesis, and how it flows from plants to animals.

During Voyage training workshops, teachers learn strategies for making the study of energy fun and exciting. Teachers receive first-hand training in how to guide their students as the 4-foothigh Energy Pyramid becomes classroom exhibit on energy. Through such Photosynthesis as activities Conserving Energy: Scramble and Tundra Math, teachers confidence to lead students on a voyage of discovery as they explore how energy is central to biology and how it links the natural and physical sciences. For more information, call the Manager National Programs at the number above. The purpose of the Wildlife Conservation Society, since its founding in 1895 as the Zoological New York Society, has been to save wildlife and inspire people to care about our natural The Society heritage. continues tο pioneer environmental education programs throughout the U.S. and abroad. It is the world's leading international conservation program devoted to saving endangered species and ecosystems.



Bullfrog Films P.O. Box 149 Oley, PA 19547 1-(800) 543-3764 Fax: (610) 370-1978

E-Mail: bullfrog@igc.org

Web: http://www.bullfrogfilms.com

Provides educational films and videos on energy and energy-related issues. Titles include Bill Loosely's Heat Pump; Decision: Energy for the Future; The Energy Bank; Energy Efficiency; Energy, Technology and Society; Harness the Wind; Living Under the Cloud: Chernobyl Today; Race for the Future; Solar Promise; Go; An Energy-Efficient Doghouse; Solar Energy Doghouse; City Lights; Rethink-Pollution Prevention and Wake Up Freddy, in the Pays; tradition of Bullfrog's classic Toast. Programs are available for purchase or rental. Special packages, with discounted prices, can be created to serve most schools' needs. A free catalog is available upon request.

An educational film distributor that offers the largest collection of energy films and videos in the country.

California Energy Commission 1516 9th Street, MS-31 Sacramento, CA 95814 (916) 654-4982 Fax: (916) 654-4420

E-Mail: gwenwa@energy.ca.gov Web: http://www.energy.ca.gov/

education

Provides the following environmental education materials for a small fee for kindergarten through grade 12: Compendium for Energy Resources; Compendium for Human Communities; Universal House, Energy, Shelter & The California Indian; 4-H Home Conservation Guide; Conserve & Renew; Energy Tech-Knowledgy; Let's Get Energized; Turn Out Those Lights--Energy Patrol; Bright Ideas; and Energy Quest. Visit the Nation's internet site dedicated solely to Richard Conserved games,

The California Energy Commission is the State's principal energy planning organization, promoting a balanced and competitive energy system through its diverse programs. puzzles, energy-related math and science experiments, and information on conservation, energy safety and alternative energy sources; the colorful new site on the World Wide Web is geared to students, parents, and teachers.

California Foundation for Agriculture in the Classroom

1601 Exposition Boulevard, FB 16 Sacramento, CA 95815 (916) 924-4380

Fax: (916) 923-5318 E-Mail: cfaitc@cfbf.com Web: http://www.cfaitc.org

Teachers may request free or low-cost items including lesson plans, comprehensive classroom units, videos, a resource guide, and the *Cream of the Crop* newsletter. Most programs are specific to California but a limited number of resources may be available for use in other States. Among lesson plans available, some have Spanish language worksheets. All lesson plans are correlated with California curriculum frameworks and undergo extensive field testing and teacher and technical review.

The Foundation encourages classroom integration of agriculture to increase understanding of its vital role in our lives. Agriculture provides a theme which encourages hands-on activities to reinforce concepts in science/environment, mathematics, English/language arts, history/social science, health/nutrition, physical education and the visual and performing arts. Contact with the Foundation is a good starting point for teaching other agriculture-related groups that produce educational resources. Educational materials developed by industries and organizations related to agriculture are reviewed lation and listed in an annually

(ed Teacher Resource Guide.

A nonprofit educational foundation that provides educational resources and training for teachers to use agriculture as an integration theme throughout kindergarten through grade 12 curricula.

26

The Center for Energy and Economic Development (CEED) 1800 Diagonal Road, Suite 370

Alexandria, VA 22314

(703) 684-6292 Fax: (703) 684-6297

Web: http://www.conx.com/ceed

America's Fuel, a describing how coal is mined and sent to the marketplace and coal's role in supplying America with electricity, environmental compatibility, technologies, and economic growth. A video, also called "America's Fuel," is available as well. Also available is a CEED "Pocket Piece" folder which gives facts about coal on such topics as coal technology, coal transportation, health and safety, coal and the environment, coal and the economy, and electricity. Teachers may also request CEED's Coal Technology poster, which describes the process of coal extraction and creating electricity, and "Coal Country," entertaining educational program to teach students about coal formation, deposit locations, mining techniques, and common uses of coal in everyday life. All are free of charge. CEED also has an extensive Home Page

on the Internet.

Center for Renewable Energy and Sustainable Technology (CREST) 1200 18th Street, N.W., 9th Floor Washington, DC 20036

(202) 530-2202

Fax: (202) 887-0497 E-Mail: orders@crest.org

Web: http://www.crest.org/

CREST operates an on-line clearinghouse of renewable energy and energy efficiency information called SOLSTICE, which provides free electronic access to documents, images, directories, and $^{\circ}$ r databases around the world 27

⟨ | ○ STICE can be accessed via Gopher

A nonprofit organization dedicated to preserving coal's role as an economical, efficient, and environmentally compatible source of electricity.

The Center for Renewable **Energy and Sustainable** Technology (CREST), nonprofit organization dedicated to promoting renewable energy sustainable development using advanced communications and computer technology.

("gopher.crest.org"), Transfer File Protocol (ftp to "solstice.crest.org"), and the World Wide Web ("http://solstice.crest.org/"). CREST has multimedia educational published CD-ROM's about renewable energy, efficiency, and global climate change; the Sun's Joules multimedia encyclopedia on renewable energy; School Energy Doctor Auditing software; the Greening of the White House CD-ROM; Spanish-English CD-ROM on Renewable Energy in Latin America; and a renewable energy demonstration module. CREST provides a free quarterly electronic newsletter, Resource, which details renewable energy activities. Available 28 on-line and by mail.

Channing L. Bete Publishing Co., Inc. 200 State Road South Deerfield, MA 01373-0200 1-(800) 628-7733 Fax: (413) 665-2671

Offers My Book series, designed for students in kindergarten and grade 1; Coloring and Activities Books for students in grades 1 through 3; and Information and Activities Books for students in grades 4 through 6. "Experiment Kits" on Magnetism, Conservation, Energy, and Electricity, all for students in grades 4 through 6, are available. Each kit contains 35 student workbooks and one instructor's Energy and Environmental posters for classroom and public display Also offers a 6th are also available. grade curriculum entitled Water Week, which includes hydropower information. Contact your local utility for availability or call the above number. Also provides educational services fulfillment utilities. 29

A publishing firm specializing in Scriptographic Booklets. Most utilities provide them to schools in their service territories free of charge; however, the booklets are available from the publisher for a fee.



Charles Edison Fund 101 South Harrison Street East Orange, NJ 07018 (201) 675-9000 Fax: (201) 675-3345

Provides "The Best of Edison Science Teaching Kits," which are available to teachers. Each kit contains nine how-to booklets based on experiments of Thomas Edison and other scientists. These are suitable for grades 4 through 8. Titles include: Energy for the Future; Useful Science Projects; Environmental Experiments; Selected Experiments and Projects; Nuclear Experiments; Energy Conservation; Alternative Energy Sources; Static Electricity - It's a Snap; and Lewis Howard Latimer Experiments. There is a small fee for handling charges. Write for coupon to receive this kit. .30 A charitable foundation providing science teachers with simple, basic, proven fun experimental booklets containing 73 experiments.

The Chlorine Chemistry Council (CCC) 1300 Wilson Boulevard Arlington, VA 22209 (202) 452-9493

Fax: (202) 296-7285 E-Mail: info@C3.org Web: http://C3.org

Making the connection between the periodic table and real life can be challenging, particularly for middle school teachers. CCC offers hands-on materials designed to introduce basic chemistry and the periodic table. By taking a look at one element-chlorine-teachers can help students understand the link between chemical "building blocks" and daily life. The video, handouts, experiments, and lesson guides in the Building Block Chemistry Program were developed by teachers for teachers to help students explore their world. For FREE classroom materials and video, write to the address above.

The Chlorine Chemistry Council is part of the Chemical Manufacturers Association established to provide information to the public regarding chlorine and to promote the practice and understanding of responsible use for chlorine chemistry.



City Public Service (CPS) Consumer Services Section P.O. Box 1771 San Antonio, TX 78296-1771 (210) 978-2862 Fax: (210) 978-4327

Web: http://www.ci.sat.tx.us/cps

Provides safety and energy educational services free of charge to schools in the CPS service area. Services include classroom presentations, a videotape library, curriculum supplements, and power plant tours. A free CPS School Energy Education Program Catalog is available upon request.

A municipally owned natural gas and electric utility serving substantially all of Bexar County and small portions of seven adjacent counties.

City Utilities of Springfield 301 E. Central P.O. Box 551 Springfield, MO 65801-0551 (417) 831-8311 Fax: (417) 831-8808

E-Mail: edecamp@mail.orion.org

Provides educational services free to instructors in areas served by City Utilities. Offers tours to power plants and water treatment plants, classroom presentations, speakers' bureau, and purchased curriculum materials for students in kindergarten through grade 12. City Utilities also has special units, "The Planet Water" and "Are You Being Safety Conscious Around Electricity." Single copies are available to teachers outside City Utilities' service area. 33

A municipal utility serving the metropolitan area of Springfield with electricity, natural gas, and water.



Cobblestone Publishing 7 School Street

Peterborough, NH 03458 1-(800) 821-0115

Fax: (603) 924-7380

E-Mail: custsvc@cobblestone.mv.com Web: http://www.cobblestonepub.com

Publishes educational materials for students in grades 5 through 8. Energy-related titles are: Energy: Powering Our Nation; Recycling; Earth: A Global Spaceship; Planet Earth: Home Sweet Home; and a theme pack with activities, ENVIRONMENT. Materials may be purchased from the publisher. Free catalogs are available upon request. 34

A publishing firm specializing in magazines for children and teaching resources.

Colorado School of Mines
Teacher Enhancement Program
Office of Special Programs
and Continuing Education
Golden, CO 80401
1-(800) 446-9488 x 3303
Fax: (303) 273-3314
Web: http://www.mines.edu/
Outreach/Cont Ed/teacher.shtml

Three times a year, provides a free catalog of course listings specifically for teachers. Courses carry graduate-level recertification credit and content-based practical instruction; hands-on experience; and, in some cases, extensive field trips. Offers for a nominal fee What's Under Your Feet, an earth science activity book for students in kindergarten through grade 6; Sharing Science with Children, a survival guide for visiting scientists and engineers in the classroom; and Sharing Science: Linking Students with Scientists and Engineers, a survival guide for teachers.

A State college of science and engineering teacher enhancement program offering coursework and resources for primary school and secondary school educators in science, energy, math, technology, and the environment.



The Consumer Aerosol Products Council 1201 Connecticut Ave., N.W., Suite 300 Washington, DC 20036 (202) 833-9471

Offers "Another Awesome Aerosol Adventure" educational unit for students in grades 4 through 8. Included is an 11-minute video produced by the makers of the children's television program "Beakman's World." Designed with humor in mind, the video, along with accompanying teacher and student guides and take-apart aerosol can, makes the complex issues of aerosol technology, ozone depletion, and environmental awareness memorable and fun for a middle school-age audience. "Another Awesome Aerosol Adventure" available through Modern Talking Pictures. To order, call Modern's toll free number 1-(800) 243-6877 and ask for digest #K-0190-A. 36

Supported by companies that manufacture and market aerosol products, the Consumer Aerosol Products Council (CAPCO) was formed to provide information on aerosols and environmental issues for consumers, media, and educators at all levels.

Culver Company 316 Merrimac Street Newburyport, MA 01950 1-(800) 4-CULVER Fax: (508) 463-1715

Web: http://www.culverco.com

Produces booklets, videos, posters, and program enhancement items for children and adults. Teacher discussion guides are also available. Utilities purchase and distribute these materials in their service areas; other organizations may purchase them directly.

A developer and publisher of educational materials about energy and related topics.



Dayton Power & Light Company School Programs 1065 Woodman Drive Dayton, OH 45432 (937) 259-7251 Fax: (937) 259-7813

Provides free educational programs and resources for students in kindergarten through grade 12 to schools within the utility's service area. Programs include customized computer program on energy conservation; an electric and natural gas safety program; an energy conservation program in which Boy Scouts and Girl Scouts can earn an energy awareness patch; science fair kits for teachers and a recognition event for top science fair projects; workshops to provide educators with energy-related information resources; power plant and energy museum tours; and classroom presentations. Materials provided include booklets, videos, posters, student handbooks, and teacher's guides with classroom activities. 38

An investor-owned electric, steam and natural gas utility that serves 464,000 customers in 24 counties of a 6,000-square-mile area in west central Ohio.

Denver Earth Science Project
Office of Special Programs & Continuing
Education
Colorado School of Mines
Golden, CO 80401
1-(800) 446-9488 x3038
Fax: (303) 273-3314
E-Mail: jproud@mines.edu
Web: http:www.mines.edu/Outreach/
Cont_Ed/desp.shtml

Provides, for a fee, a series of educational workshops that address a range of earth science topics developed by trained curriculum development teams. The team members are experienced earth science teachers and practicing scientists. The hands-on student activities included ch module incorporate real data and

A teacher enhancement program, in partnership with corporations, Federal agencies, school districts, and professional organizations, which provides innovative earth science curriculum materials for use in kindergarten through grade 12 and teacher training.

follow a problem-solving approach. Each module integrates mathematics, geography, economics, and social and environmental issues with basic earth science concepts. The modules are:

- "Oil and Gas Exploration" (grades 7-12)
- "Ground Water Studies" (grades 7-9)
- "Paleontology and Dinosaurs" (grades 7-9)
- "Energy-A Closer Look at Oil and Gas" (grades 4-6).

Each module contains a teacher resource kit which includes a teacher/student notebook, maps, audio-visual materials, posters, oil samples, groundwater models, etc. Call to find out the location of the nearest training site.

Disney Educational Productions 105 Terry Drive, Suite 120 Newtown, PA 18940 1-(800) 295-5010 Fax: (215) 579-8589

Offers educational videos and videodiscs on energy, the environment, earth science, recycling, and water. Curriculum-oriented videos come with discussion guides and lesson plans. Titles include:

- "Recycle Rex" (starring Disney's hip animated recycling dinosaur)
- "The Energy Savers" (starring Donald Duck, Mickey Mouse and Goofy)
- 10 "Bill Nye the Science Guy" earth science shows
- "Zort Sorts: A Story About Recycling"

Disney Educational Productions develops and distributes entertaining and thought-provoking videos and interactive laser discs that excite children of all ages to learn about a variety of subjects.



 "The Great Search--Man's Need for Power and Energy"

 "Return to Sender: A Story About Littering."

Interactive discs, such as Recycle Rex and Discover Quest: Explorations in Earth Science, encourage learning with a mix of videos, interviews, games, on-line glossaries, and comprehensive guide-Programs are available for purchase or lease. Call the toll-free number to request a free catalog.

DuPont Corporate Contributions Nemours Building N9541 Wilmington, DE 19898

Offers for a fee an environmental resource kit developed with the National Science Teachers Association (NSTA). Material covers air, land, life, people, planet, and water. The kit, which is targeted for grades 4 through 9, includes color posters, population data charts, and color transparencies. Call 1-(800) 722-NSTA.

External Affairs of a chemical company.

E2: Environment & Education P.O. Box 20515 Boulder, CO 80308-3515 (303) 442-3339 Fax: (303) 442-6633

E-Mail: e2ee@enviroaction.org Web: http://www.enviroaction.org

Developed Environmental ACTION (<u>A</u>nalyze, <u>C</u>onsider Options, <u>T</u>ake Action, In Our Neighborhoods). This is relevant, supportive and clearly structured interdisciplinary environmental education curriculum for les 6 through 12. The program offers 35 RIC rate modules: Energy Conservation,

er Conservation, Waste Reduction,

A nonprofit organization dedicated to helping young people develop awareness of environmental challenges, and the understanding and skill to take informed and effective action.

Chemicals: Choosing Wisely, Food Choices, and Habitats & Diversity. Each module provides instruction on how to investigate environmental issues while creating opportunities to practice action The hands-on activities move students from awareness to choice into action. Students conduct an audit of current resource consumption research alternative practices, services, and technologies. They conclude with a plan for change based on a cost benefit analysis. By having students use the school community as their laboratory, school becomes a model sustainable practices. For a fee, E2 will provide teacher training workshops. 42

Earth Foundation 5151 Mitchelldale, Suite B-11

Houston, TX 77092 (713) 686-1205

Fax: (713) 686-6561

E-Mail: EarthFound@aol.com Web: http://www.earthfound.com

Each year thousands of schools participate in the Earth Foundation's Rescue the Rainforest Project. Thus far, the network of 8,000 active environmental teachers and students responsible for adopting over 90,000 acres of rainforest. A "Rainforest Project Kit" is available to educators. The kit, which includes curriculum, videos, instructions. ready-made and a fundraising project, contains everything a school will need to supplement an ecology unit with a teaching method called "Solution-Based Teaching." Upon completion, participating schools receive a certificate recognizing them for the acres adopted and written updates about the area being preserved. Schools that An organization dedicated to environmental education and conservation.



adopt five or more acres receive a free follow-up video that shows students live footage of the area. Call 1-(800)-5MONKEY to receive your "Rescue the Rainforest Kit" and for more information about this project or the Coral Reef Rescue Campaign.

East Ohio Gas Educational Affairs Department P.O. Box 5759 Cleveland, OH 44101-0759 (216) 736-6218 Fax: (216) 736-5323

Promotes energy awareness in the community and emphasizes the importance of natural gas. Provides educational resources, free of charge, to primary school and secondary school educators in the areas served by East Ohio Gas. A free Educational Resources & Awards Catalog offers a variety of programs and materials. Topics include natural gas vehicles, natural gas safety, science fair planning, and parental resources.

A natural gas utility serving over one million customers in a 23-county area throughout northeast and southeast Ohio.

Edison Electric Institute (EEI)
Order and Billing
701 Pennsylvania Avenue, N.W.
Washington, DC 20004-2696
1-(800) 334-5453
Fax: 1-(800) 525-5562

Web: http://www.eei.org

Suggests that you first contact your local electric utility. Many utilities have educational programs about energy and the environment for schools. EEI's publications catalog is free. Other publications are available for a fee. 45

An association of share holder-owned electric utilities.



Edison Plaza Museum P.O. Box 2951 350 Pine Street Beaumont, TX 77704 (409) 981-3089 Fax: (409) 981-2106

Contains the largest collection of original Edison artifacts west of the Mississippi River. All eight major fields of Edison's achievement are represented. The museum is housed in the historic Travis Street Substation--the first building to distribute electric power in east Texas. Exhibits include past, present, and future energy technologies. A free guide book, brochure, and children's book are available upon request and can be mailed anywhere.

Established in 1982 by Gulf States Utilities Company as a nonprofit, educational institution to focus on the inventions of Thomas A. Edison and show how the electric industry has expanded on his patents to improve the quality of life.

Educational Development Specialists 5505 E. Carson Street, Suite 250 Lakewood, CA 90713 (310) 420-6814 Fax: (310) 420-1485

Offers the Think Earth education program nationwide to sponsors who give the program to schools. This award-winning program interrelates air, land, water, and energy topics into a comprehensive environmental education school pack. It contains units for students in kindergarten through grade 6, plus a fully animated video. A free catalog is available on the program. 47

Energy and environmental education program developers and distributors.



Energy Source Education Council Program Distribution Office 5505 E. Carson Street, Suite 250 Lakewood, CA 90713 (310) 420-6814 Fax: (310) 420-1485

Has an Energy Source Education Program that is financially supported by member organizations (mostly utilities) from the private sector. Material is sold to the utility companies who then distribute it at no charge to classrooms in their service areas. Material to others is available for a fee. A free catalog is available. 48

A nonprofit organization involved in developing and distributing quality energy educational programs.

Enterprise for Education, Inc. 1316 Third Street, Suite 103 Santa Monica, CA 90401 (310) 394-9864 Fax: (310) 394-3539

Publishes Energy 90s, the Energy and Environmental Skill Builder series, and the Math at Work series. Products range from in-depth, semester-long programs to short, one- to five-classroom period lessons on energy and environmental issues. All publications are printed in full color and include up-to-date information and an abundance of science experiments and classroom activities.

The Skill Builder series, 8- and 16-page booklets, comprise the following topics:

 Environmental--"Using Our Resources Wisely" (grades 2-4);
 "The Greenhouse Effect and Global Warming" (grades 6-12);
 and "Percentages Help an Environmental Engineer" (grades 6-8) Offers booklets for primary school and secondary school science classes FREE from most electric utilities.



- Conservation--"Efficiency of Electric Appliances" (grades 6-10);
 "Climate and Comfort" (grades 6-12); and "Is Efficiency the Best Energy Source?" (grades 9-12)
- Nuclear Energy--"Nuclear Reactor" (grades 8-12); "The Atom and Radiation" (grades 6-12); and "Nuclear Fuel Cycle" (grades 8-12)
- Fossil Fuel--"Coal: The Once and Future King?" (grades 6-9); "Natural Gas" (grades 6-12); "Geology of Oil" (grades 6-12); and "Refining Oil" (grades 8-12)
- Electricity--"Mouse House Surprise," a 32-page Teacher BIG book and student little book (grades K-2); "Sam and Jody Save the Circus" (safety) (grades 2 and 3); "Paths for Electricity" (safety) (grades 3-5); "Energy Transformations" (grades 4-9); "Generating Electricity" (grades 5-9); "Sources (grades Electricity" "Demand for Electricity" (grades "Working With Energy (grades Graphs" 6-12); "Measuring Helps an Electrician Wire an Apartment" (grades 4-6); "An Electrical Engineer Plans an Electrically Safe Outdoor Concert" (safety) (grades 5-9); "Electricity from Wind, Water & Sunlight" (grades 4-8), which includes a lab activity kit; and "Risk: Taking Chances, Making Choices" (grades 6-10).

When available, the above materials are free of charge from most electric utilities. Contact the education specialist at your local utility. Materials also may be purchased directly from the publisher.



Environmental Hazards Management Institute (EHMI)

10 Newmarket Road P.O. Box 932 Durham, NH 03824 (603) 868-1496

Fax: (603) 868-1547

E-Mail: ehmiorg@aol.com

Offers environmental, health, and safety education and outreach materials on topics such as recycling, efficiency/conservation and indoor air quality, household hazardous product management, water quality, composting. Included are: EHMI Earth Express®, a publication for elementary school children designed to increase understanding awareness and environmental issues; Kids Leading the Way in Energy ConservationTM, a color-in poster; the "Automobile Care for the Environment" video kit addressing pollution prevention and automotive product management for high school students; the "Home Environment Wheel™ addresses energy efficiency and indoor air quality at home. There is a fee for all educational materials, but discounts are available for bulk orders. A free catalog is available.

A nonprofit nonpartisan environmental, health, and safety education institute working promote to environmental responsibility in the home. at the workplace, and in the community through education and relationship building.

EV Media 612 Colorado Avenue, Suite 111 Santa Monica, CA 90401

(310) 394-3980

Fax: (310) 394-3539

Provides publications and activity kits on electric vehicles (EV) for schools and the general public. Materials range from color booklets for secondary school students to teacher guides, electric vehicle model kits, discussion leader guides free from many electric utilities with EV pro-🥯 _ is. Materials cover electric vehicles,

An educational publishing company providing electric vehicle-related materials.

electricity, energy efficiency and conservation. Titles include Electric Car 1997, a 16-page color booklet (for grades 7 through 12); the 128-page Teacher's Electric Car Book, everything a teacher needs to conduct a unit on electric vehicles; "The Electric Flyer Model Kit," which includes everything needed to build a working, table-top size model electric vehicle; and "The Electric Vehicle Classroom Kit," which includes a classroom set of color booklets; the Teacher's Electric Car Book, and five "Electric Flyer Model" kits. Battery/Charger option for the EV "Classroom Kit" includes 5 rechargeable 1.5 volt AA Ni-cad batteries and a fourunit battery charger. Contact your electric utility electric vehicle department for these materials, which are often offered at no cost to educators.

Exxon Company, U.S.A.
Public Affairs
P.O. Box 2180
Houston, TX 77252-2180
(713) 656-8758
Fax: (713) 656-6267

Web: http://www.exxon.com

Offers a collection of scientific reports and brochures that document the environmental recovery of Prince William Sound, Alaska, following the 1989 Valdez oil spill. Also available is the 22-minute video, "Scientists and the Alaska Oil Spill;" and the video and plan on artificial lesson "Aquariums Without Walls;" comic book entitled Mickey & Goofy Explore the Universe of Energy. materials are free, but quantities are 52 limited.

Oil company department that responds to public inquiries pertaining to energy and environmental issues.



Flexible Packaging Educational Foundation

1090 Vermont Avenue, N.W., Suite 500 Washington, DC 20005 (202) 842-3839

Fax: (202) 842-3841

Offers Less Waste in the First Place: Six Lessons on Packaging, Flexible Packaging and Source Reduction, a lesson guide on packaging, free educators. to Appropriate for students in grades 4 through 10, the lessons discuss the historic, scientific, social, and environmental considerations involved in the design, development, and disposal of packaging. Included are instructions for a "hands-on" packaging design contest for students and suggestions on how to involve the local community. The lesson plan also features a listing, which can be used as a handout, of other resources and an explanation of common myths surrounding packaging and garbage. 53

A trade association of manufacturers and suppliers of flexible (or nonrigid) packaging, supporting educational efforts on the purpose of packaging and its role in the first "R" of waste management--reduction.

Florida Energy Office Department of Community Affairs 2555 Shumard Oak Boulevard Tallahassee, FL 32399-2100 (904) 488-2475 Fax: (904) 488-7688

Focuses on solar energy and conservation. Renewable Energy Activities for Middle Grades, lesson plans for students in grades 6 through 8, is available. Solar and Energy Conservation Projects for Students is available to elementary school teachers. Another publication, Energy Research Projects Guide, assists students in their selection of energy topics for science fair projects. Single copies are free of charge to Florida teachers and students.

The State's point of contact on all energy-related matters, issues, and programs.





Florida Power & Light Company Energy Encounter

P.O. Box 128

Ft. Pierce, FL 34954

(561) 468-4111 Fax: (561) 467-7565

Web: http://www.fpl.com

Provides limited free energy educational resources within the Florida Power & Light service area. Sponsors an electrical safety poster contest for elementary and Offers special schools. environmental education presentations on manatees and sea turtles, and a series of environmental education pamphlets. Operates the Energy Encounter visitors' center at the St. Lucie Nuclear Power Plant on Hutchinson Island. The center is open to the public and offers physical and environmental science presentations to school groups as well as teacher workshops for educators. Presentations meet the science objectives for Florida. Also offers environmental tours of the Barley Barber Swamp and Turtle Beach Nature Trail.

A regulated investorowned utility that serves more than 3 million customers in Florida.

Florida Solar Energy Center (FSEC) 1679 Clearlake Road Cocoa, FL 32922-5703 (407) 638-1000 Fax: (407) 638-1010 Web: http://www.fsec.ucf.edu

Offers free publications on solar water heating, energy-efficient buildings, transportation, and lighting. Provides workshops and information packets to students, teachers, and energy professionals.

The energy institute for the State University System, FSEC's mission is to conduct research on alternative energy technologies, ensure the quality of solar energy equipment, and educate people about their energy options.



Foodservice & Packaging Institute, Inc. 1901 North Moore Street, Suite 1111 Arlington, VA 22209

(703) 527-7505 Fax: (703) 527-7512

E-Mail: foodserv@crosslink.net Web: http://www.fpi.org/fpi

Now offers three issue sheets--"Environment," "Sanitation," "Lifestyle"--that explain the importance of foodservice disposable products to today's consumers. These informative single-page sheets are appropriate for middle school and high school students. FPI has just published the Environmental Stewardship Report, a detailed guide to the foodservice disposables industry's environmental accomplishments. report is a useful resource for educators to use for their reference. Individual copies of FPI materials are free of charge to educators. Contact FPI to receive the price for larger quantities.

A nonprofit trade associafor manufacturers, suppliers, and distributors of foodservice disposable products. These products consist of single-use cups, plates, bowls, bags, cutlery, trays, hinged-lid "clamshell" containers, and other paper, plastic, and aluminum items. Foodservice & Packaging Institute, Inc. (FPI) supports the environmentally responsible manufacture, distribution, use, disposal of foodservice disposables.

Frey Scientific A Division of Beckley Cardy 100 Paragon Parkway Mansfield, OH 44903 1-(800) 225-3739 Fax: (419) 589-1660

Web: http://www.Beckleycardy.com

Offers a general science catalog that includes over 75 pages of products for earth science and ecology study. Product line consists of books, charts and posters, videos and video discs, software, kits, games, manipulatives, general supplies and equipment, and more. Products are available for a fee; catalog is free of charge.

A full-line supplier of educational materials, equipment, and supplies for science, designed for students from kindergarten through college.



General Atomics Sciences Education Foundation

General Atomics 3550 General Atomics Court San Diego, CA 92121-1194 (619) 455-3335

Fax: (619) 455-3379

E-Mail: pat.winter@gat.com

Web: http://www.fusioned@gat.com

Offers information to high school and middle school teachers and students regarding current U.S. and worldwide nuclear fusion research that is aimed at understanding fusion science and its role in providing an energy resource for tomorrow's needs. Available materials include a 20-minute video, "Fusion: Creating a Star on Earth" and a high school teachers guide and workbook. A full size color poster is also available. These items are available free, while supplies last. Requests for the teachers guide and poster must be sent on school letterhead. In addition, General Atomics will send out at no charge material explaining the operation and safety of high temperature gas-cooled reactors which are meltdown proof and convert about 50 percent of the fission energy to electricity. When large atoms are fissioned by neutrons, energy is released. Nuclear reactor plants use this energy to make steam or hot gas to drive turbines make drive generators to which 59 electricity.

A research and development center for high-technology systems.

A nonprofit educational organization serving teachers and students nationwide to increase awareness and understanding of geothermal energy.

Geothermal Education Office 664 Hilary Drive Tiburon, CA 94920 (415) 435-4574 1-(800) 866-4436 Fax: (415) 435-7737

E-Mail: mnemzer@aol.com

Web: http://www.ensemble.com/geo

Provides free booklets, small posters, tters, and selected geothermal publications (some in class Available for a fee are an

elementary-level video with transcript and glossary; and a 90-page geothermal curriculum for grades 4 through 8. The curriculum, endorsed by the National Science Resources Center, covers the geology, history, and uses of geothermal energy, placed in the context of today's energy needs. Includes copy-ready student information pages; science experiments; math, language, arts, and social studies activities; a glossary; and other suggested resources.

Global Issues Resource Center East I, Cuyahoga Community College 4250 Richmond Road Cleveland, OH 44122 (216) 987-2224 Fax: (216) 987-2053

For a fee, the Center provides to primary school and secondary school educators a variety of workshops that address a range of topics and emphasize interdisciplinary and hands-on strategies. The Energy Choices for the Future unit, supported by a teacher training workshop, is sold to educators for grades 4 through 7. Teacher and student materials include a "Teacher's Guide and Resource Box." Subject-specific bibliographies (energy, environment, conflict resolution, global issues) are available for a nominal fee.

A nonprofit library and educational resource, which works in partnership with foundations, Federal agencies, and school districts, that provides innovative programs and teacher training focusing on global issues, energy, environment, and conflict resolution.

GPU Energy 2800 Pottsville Pike P.O. Box 16640 Reading, PA 19640-0001 (201) 644-4294 Fax: (201) 455-8270 E-Mail: clafevre@GPU Web: http://www.GPUKIDS.com

Provides free energy education resources for all grade levels within GPU Energy service area on the ve interactive Web Site, which offers

Headquartered in Reading, PA, GPU Energy serves 68 counties throughout New Jersey and Pennsylvania. GPU Energy is a subsidiary of GPU, Inc., an investorowned electric utility based in Parsippany, NJ.

teacher modules, lesson plans, student activities, games, contest, a teacher chat room, and much more.

62

Hawaiian Electric Company, Inc. Education & Consumer Affairs Division 900 Richards Street Honolulu, HI 96813 (808) 543-7511

Fax: (808) 543-7412 Web: http://hei.com

Provides free teaching materials to educators in the areas served by Hawaiian Electric and its subsidiaries Maui Electric Company and Hawaii Electric Light Company. Services include classroom programs, career programs, resources for educators, certified workshops for educators, video, and classroom literature for kindergarten through grade 12. "Hawaii's Electric Century," an education module for Hawaiian history classes, is available for use in grades 4, 7, and 11.

An investor-owned electric utility that serves the island of Oahu in Hawaii.

Houston Lighting & Power Company Community Relations/Educational Services 1111 Louisiana P. O. Box 1700 Houston, TX 77251 (713) 207-1111 or (713) 207-7579 Fax: (713) 207-9892

E-Mail: lucretia-ahrens@hlp.com Web: http://www.hlp.com

Provides free educational services to kindergarten through grade 12 educators in the Houston Lighting & Power service area. Services include classroom presentations, films, videotapes, publications, and activity booklets for students. Resources and newsletters for educators

An investor-owned electric utility, headquartered in Houston, serving a 5,000-square-mile area on the Texas Gulf Coast.



and teacher in-service training, as well as teacher workshops, are also available. In addition, curriculum supplements are available on science and social studies topics and on electricity safety and fuel sources.

Illinois Department of Commerce and Community Affairs Office of Coal Development and

Office of Coal Development and Marketing 325 West Adams, Room 300 Springfield, IL 62704-1892 (217) 782-6370

Fax: (217) 785-2618

E-Mail: BAntonini@MHD084R1.State.

IL.US

Web: http://www.ILCOMMERCE.com/

Provides materials on coal production, distribution, usage, research, development, and demonstration of clean coal technologies. Materials available include: Coal is Cool Activity Book, with 60 coal-related puzzles, which recommended for kindergarten through grade 4; Illinois Coal Teacher's Guide, developed with lesson plans and handson activities for grades 5 through 8; a "Kids, Coal and Environment"; and a poster, What's Coal Got To Do With You? All materials are Coal awareness and education efforts target the general public through the media, schools, and special programs in an attempt to diffuse myths regarding coal and to disseminate sound, scientific information. An order form listing all the various publications is available upon request.

A State coal program committed to the continued and expanded use of Illinois' coal resources in environmentally safe and economically viable ways.



Independent Petroleum Association of America

Information Services Department 1101 16th Street, N.W. Washington, DC 20036

(202) 857-4722 Fax: (202) 857-4799

Web: http://www.ipaa.org

Provides for a fee an annual yearbook of statistics on the crude oil- and natural gas-producing States. The Oil & Natural Gas Producing Industry In Your State compiles exploration and production statistics for each producing State in a simple manner, suitable for junior high and senior high school students.

The national association representing independent crude oil and natural gas explorers/producers.

Indiana Department of Education Office of Program Development Center for School Improvement & Performance Room 229, State House Indianapolis, IN 46204-2798 (317) 232-9186 Fax: (317) 232-9121

Provides energy, economics, and environmental curricular materials and workshops to kindergarten through grade 12 classroom teachers across Indiana. The Energy, Economics, and the Environment publication consists of case studies supported by classroom activities, actions, and issues. Completing the Cycle--It's Up to Me contains 55 interdisciplinary lessons that focus on recycling and the environment. This curriculum for kindergarten through grade 8 was written by classroom teachers from Frankfort Community Schools and Crawfordsville Community Schools. The Phase I booklet is designed for use in kindergarten through grade 3, and Phase II is for use in grades 4 through 8. A minimal charge will be assessed for each A list of other en-**EKIC**umental and energy education

rials is available upon request. 67

A State education agency that provides primary school and secondary school teachers with staff development programs and curricular assistance in environmental and energy education.

The Institute for Chemical Education (ICE)

Department of Chemistry University of Wisconsin-Madison 1101 University Avenue Madison, WI 53706-1396 (608) 262-3033 1-(800) 991-5534

Fax: (608) 265-8094

E-Mail: ICE@chem.wisc.edu
Web: http://ice.chem.wisc.edu/ice

Provides chemistry education materials and workshops to kindergarten through grade 12 teachers throughout the world. The publications, kits, and workshops are designed to help teachers include hands-on science activities in their everyday classrooms. ICE's Topics in Chemistry series provides background chemical and environmental information on everyday topics. Topics include: Acid Rain--a brief history of acid precipitation; the sources of gases that cause acid rain and their conversion to acid in the atmosphere; details of the effects of acid precipitation on the environment; and available alternatives to reduce emissions that contribute to acid rain. Acid Rain, Experimental Supplement-five experiments showing the effects of acid rain on environment. using easy-to-find materials; notes on presentation and curriculum integration are included. Ozone--the chemistry, uses, importance of ozone and chlorofluorocarbons; a history of theories involving their interactions in the atmosphere; the effect of ozone depletion on life; examination of changes in public policy; and the response of industry. 68

A nonprofit educational organization that provides chemistry resources and graduate-level workshops for kindergarten through grade 12 teachers to better integrate hands-on chemistry into their classrooms.



Integrated Waste Services Association

1401 H Street, N.W., Suite 220

Washington, DC 20005 (202) 467-6240

Fax: (202) 467-6225

TWSA offers WasteWorld, a middle school curriculum addressing environmental, economic, and energy-related issues associated with municipal solid waste management. Originally developed with support of DOE's National Renewable Energy Laboratory, this multimedia simulation presents a balanced view of source recycling, waste-to-energy, and landfilling, enabling students to recommend solid waste management plans for their communities. The updated package slide show, interactive includes a computer software for both Macintosh and Windows (also available in color on CD-ROM), revised student activities and teacher's guide, glossary, and resources to supplement student research. Write or call for more information.

Integrated Waste Services Association (IWSA) represents companies that use trash to produce energy as part of a community's integrated solid waste plans. Waste-to-energy facilities use waste to generate enough energy to power 1.3 million homes.

Jacksonville Electric Authority (JEA) 21 West Church Street Jacksonville, FL 32202 (904) 632-5200 Fax: (904) 632-6335

Web: http://www.jea.com

Provides free energy educational (booklets, posters, resources audio/visual materials, etc., kindergarten through grade 12) schools within the JEA service area. Services include student and teacher materials, speakers, power plant tours, teacher seminars with affiliates: Pelotes Island Preserve, Tree Hill, and the University of North Florida. A free fact sheet that describes the services and materials is available upon request.

A municipal electric utility serving over 320,000 customers in Jacksonville, FL, and vicinity.



Johnson Controls, Inc. Academy of Energy Education 507 E. Michigan Street Milwaukee, WI 53202 (414) 274-4197

(414) 274-5574 Fax: (414) 274-5030

E-Mail: mike.d.ewald@jci.com michelle.l.tanem@jci.com Web: http://www.johnsoncontrols.

com/cg

Offers, in partnership with the National Energy Foundation and Upper Iowa University, the Academy of Energy Education, a curriculum-enhancing program that promotes energy education in kindergarten through grade 12 and expands into a school-to-work transition experience. Designed to encourage students to explore energy usage and its impact on the environment, programs include: Energy Fun for kindergarten through grade 3; Energy Fundamentals for grades 4 through 6; Energy Action Patrol for grades 5 through 8; Energy Action Teams for grades 6 through 9; and Energy Action Technology for grades 9 through 12. For older students, the Academy features school-to-work and high school-tocollege transition programs. For more information, call your local Johnson Controls office or NEF at 1-(800) 616-TEAM.

Provides facility services building and control system solutions to meet the specific needs of all types of nonresidential buildings, which include training staff to operate equipment more ciently, installing, maintaining, servicing and HVAC controls mechanical systems, lighting controls, and life safety systems; performance contracting; and complete outsourcing operations.

Keep America Beautiful, Inc. 1010 Washington Boulevard Stamford, CT 06901 (203) 323-8987 Fax: (203) 325-9199

E-Mail: kabcomms@aol.com Web: http://www.kab.org

Offers educational materials for use in kindergarten through grade 12. Waste in Place, a curriculum supplement for ators of kindergarten through grade Nicotroduces children to responsible

A national nonprofit public education organization that is dedicated to improving waste-handling practices in American communities.

waste handling in over 30 hands-on lesson plans; and Waste: A Hidden Resource, a curriculum supplement for educators of grades 7 through 12, provides an overview of solid waste and encourages students' investigation and decisionmaking through role-playing in a mock crisis. Both are available for a Other resources include Plastics Recycling By The Numbers, a classroom activity guide designed to teach students in grades 3 and 4 about plastic and its uses, the Plastic Container Coding System, and how to separate plastics for recycling; Mister Rogers' Activity Book for Young Children, which provides lessons on reuse and recycling; and "Pollution Pointers For Elementary Students," a one-page fact sheet which describes 24 things children can do. "Woody's Wise Waste Handling Tips for Kids" provides simple projects children can perform at home and in the classroom. These are available for a nominal fee. A free materials catalog is available upon request. Free samples of lesson plans and other publications are available at the above 72 Web site.

Kids For A Clean Environment (Kids F.A.C.E.) P.O. Box 158254 Nashville, TN 37215 1-(800) 952-3223 Fax: (615) 333-9879 E-Mail: kidsface@mindspring.com

Provides free membership to children and teachers. Included with membership is the membership guide Our World, Our Future: A Kids Guide to Kids for a Clean Environment; a membership certificate; and a subscription to the bimonthly newsletter Kids F.A.C.E. Illustrated. Material focuses on environmental topics and offers proactive ects that can be performed at home

A nonprofit children's environmental organization.

or at school. Their current project is the Kids International Earth Flag. Children may send in squares with their idea of a clean environment drawn or painted on them. For instructions, send a self-addressed stamped envelope to the above address.

Kissimmee Utility Authority (KUA)
Office of Communications
P.O. Box 423219

Kissimmee, FL 34742-3219 (407) 933-7777

Fax: (407) 933-1761

Provides free energy educational resources (coloring books, booklets, calendars, posters, kits, audio/visual materials, etc., for use in kindergarten through grade 12) to schools within the KUA service area. Services include student and teacher materials, speakers' bureau, power plant and energy control center tours, and teacher seminars with neighboring utilities. A free color brochure highlighting the services and materials is available upon request. 74

A municipal electric utility serving over 45,000 customers in Kissimmee, FL, and vicinity.

The Learning Works P.O. Box 6187, Dept. NEIC Santa Barbara, CA 93160 (805) 964-4220 Fax: (805) 964-1466

Publishes educational activity books for youth ages 4 to 17. Energy-related titles include: Weather, Electricity, Environmental Investigations; Science Sampler; Primary Science Sampler; Earth Book for Kids: Activities to Help Heal the Environment; My Earth Book; and Likeable Recyclables. In addition, stamps with environmental themes are available for a fee and may be ordered from school y stores, bookstores, or the pub-

RIC. A free catalog is available upon

Full Text Provided by ERIC St.

A publishing firm specializing in children's educational books.

Midwest Renewable Energy Association P.O. Box 249

Amherst, WI 54406 (715) 824-5166

Fax: (715) 824-5399

Offers special workshop series for teachers, children, and the general public. Hosts the Midwest Renewable Energy Fair every June at the Portage County Fairgrounds in Amherst, WI. This annual event features workshops, exhibits, speakers, a model home, renewable energy home tours, alternatively fueled vehicle showcase, regional Junior Solar Sprint competition, entertainment, and more. Offers year-round workshops renewable energy and energy efficiency. A Renewable Energy/Energy Efficiency Directory is available for a minimal fee, as is ReNews, a quarterly newsletter. 76 A grassroots private nonprofit educational organization dedicated to promoting renewable energy and energy efficiency through education and demonstration.

Mineral Information Institute (MII) 475 17th Street, Suite 510 Denver, CO 80202 (303) 297-3226

Fax: (303) 295-6463

Provides mineral and energy information at no cost to teachers. Companies and other organizations may purchase MII materials at a nominal cost. Materials include posters, lessons, activities, and referrals to other sources providing free or low-cost educational information. The purpose of all materials is to increase awareness that Everything We Have and Everything We Use Comes From Our Natural Resources. MII sponsored and continues to support revisions to the high school integrated science textbook, Global Science: Energy, Resources, En-Teachers should write on vironment. school letterhead indicating grade(s) 🐧 t. For a fee, a Go Kit for Classroom

【【Cers is also available.

A nonprofit educational organization providing free resources and contacts to support classroom teachers. Also provides technical support to new and established earth science programs.

77

Minnesota Department of Public Service

121 7th Place East, Suite 200 St. Paul, MN 55101-2145 (612) 296-5175

Fax: (612) 296-0201

E-Mail: infocenter@dpsv.state.mn.us Web: http://www.dpsv.state.mn.us

Provides a wide range of energy (primarily conservation materials brochures and fact sheets) targeted to residential, commercial, and industrial audiences. This information is designed specific conservation encourage and to increase public awareness of energy/environmental issues. Some of these free materials may be appropriate for students in grades 8 through 12. More direct education efforts are geared toward Minnesota home builders and community energy auditors. The Department's Energy Information Center has a full-time staff to answer consumers' energy-related questions and to provide individualized advice as needed. 78

A State energy office which protects the public in utility rate and quality of service matters, provides a range of energy information, and promotes conservation and renewable resource development.

National Aeronautics and Space Administration (NASA) 300 E Street, S.W., Code FE Washington, DC 20546-0001 Web: http://www.nasa.gov

Provides to educators free of charge teachers guides with classroom activities explaining NASA spaceflights and projects; NASA educational program information; NASA fact sheets; educational briefs; brochures; lithographs; wallsheets; nontechnical publications; and access to videotapes and slide sets for duplication. New NASA educational materials are listed triennially in the newsletter *Educational Horizons*, which is provided to educators. Educators can

Ss listed above.

A Federal agency with programs to advance the Nation's education goals through expanding and enhancing the scientific and technological competence of all students and educators.

79

National Arbor Day Foundation

100 Arbor Avenue

Nebraska City, NE 68410

(402) 474-5655 Fax: (402) 474-0820

E-Mail: mwickless@arborday.org

Web: http://www.arborday.org

Provides free information on planting and care, including correctly planting windbreaks and shelterbelts, in the Conservation Trees and Trees for America brochures. Also has available for a nominal fee a book on Trees for Fuelwood: A Step Toward Energy Diversity, and, for elementary school- and middle school-age children, curriculum kits that stress the contributions made by trees and the importance of environmental stewardship. For samples of the free educational materials, including the Celebrate Arbor Day! booklet, and to receive information about the curriculum kits, write or call to request Educational Materials Sampler.

A nonprofit education organization dedicated to tree planting, conservation, and environmental stewardship.

National Association of Conservation Districts (NACD) 408 East Main P.O. Box 855 League City, TX 77574-0855 (281) 332-3402 1-(800) 825-5547

Fax: (281) 332-5259

Sponsors conservation education recognition programs for primary school and secondary school teachers as well as a poster contest for students. Publishes and distributes educational materials about conserving soil and water and other natural resources. Free materials include an education catalog containing all educational products available from NACD, information about the contest, and single copies of the Guide to Careers atural Resource Management.

A nongovernmental nonprofit organization representing nearly 3,000 soil and water conservation districts and their State associations in the 50 States and U.S. territories. NACD serves its member districts as one voice, utilizing the force of local initiative and self-government, in the conservation and development of natural resources.

6.3

National Corn Growers Association 1000 Executive Parkway, #105 St. Louis, MO 63141 (314) 275-9915

Fax: (314) 275-7061

E-Mail: corninfo@ncga.com Web: http://www.ncga.com

Provides teachers with a free educational kit, "Corn--A National Renewable Resource," which includes materials that recognize corn as a reservoir of energy and a renewable substitute for products made from expendable fossil fuels. Components of the kit include 30 student tabloids, a video, poster, resource booklet, activity sheets, sample experiand corn products. Accompanying Teacher's Guides provide supplementary information integration ideas. The World of Corn resource booklet, a statistical look at corn markets and trends, can also be requested separately and is provided free by contacting the association.

A nonprofit commodity organization representing nearly 30,000 corn farmers and 25 State-affiliated corn grower associations.

National Cotton Council of America Education Materials 1918 N. Parkway Memphis, TN 38112 (901) 274-9030 Fax: (901) 725-0510 E-Mail: info@cotton.org

Web: http://www.cotton.org

Provides for a nominal fee a variety of print and audiovisual materials on cotton, including a videotape about the highly successful and environmentally sound "National Boll Weevil Eradication Program." The tape, primarily for grades 3 through 12, includes a 3-minute program aired on the "Today's Environment" television series on the Discovery Channel. The eradication program uses an integrated approach for eliminating of the U.S. cotton industry's major

A nonprofit commodity organization representing 35,000 producers and processors of raw cotton. The organization is dedicated to strengthening the cotton industry's ability to compete effectively and profitably in the raw cotton, oilseed and value-added product markets at home and abroad.

pests, such as plowing down cotton stalks after harvest, the strategic placement of traps baited with a pheromone (sex attractant), and the judicious application of crop protection products.

National Energy Education Development Project (NEED)

P.O. Box 2518 Reston, VA 20195 (703) 860-5029

Fax: (703) 860-2903 E-Mail: need@erols.com

Web: http://energyconnect.com/need

Through hands-on science, math, museums, drama, art, and music, students reach out to family and community with energy education programs that they developed themselves. Memberships are available to teachers at little or no cost. Members can receive the following: the "Local Participation Kit"-a curriculum packet filled with hundreds of activities; energy and leadership training workshops across the United States; a subscription to Energy Exchange magazine; the opportunity to order a variety of supplemental materials free of charge; and the chance to participate in the Annual Youth Awards Program--a program dedicated to recognizing the most creative and innovative energy programs in the United States. New activities for the 1996-1997 school year include: "Primary Energy"--activities and stories for younger students; the "Primary Carnival"--a series of games to reinforce kindergarten through grade 3 knowledge; "Global Trading Game" -- an international look at the energy trade; "Energyline"-an interactive program for the classroom focusing on alternative fuels and DOE's Clean Cities program. A national network of students, educators, and leaders in government and industry dedicated to providing comprehensive energy programming.



Also offered for a reduced cost will be a set of videos focusing on renewable energy/energy conservation and fossil energy. In fall 1997, the 1997-1998 materials on electricity and many fun new programs will be released.

National Energy Foundation (NEF) Resources for Education National Office 5225 Wiley Post Way, Suite 170 Salt Lake City, UT 84116 (801) 539-1406

Fax: (801) 539-1451

E-Mail: nef@xmission.com

Web: http://www.xmission.com/~nef

Announces the establishment of the new NEF Academy. The Academy is a nationwide program of the Foundation which provides university graduate credit to educators for implementation of energy, environmental, and natural resources education in their classrooms. Academy course topics include energy conservation, rocks and minerals, and natural gas fundamentals and safety. Also included is the NEF award-winning Energy Action Patrol. Each course is independent study, with credit offered from accredited universities. New products available from NEF include two posters, "Petroleum Technology: From Refinery to Home, Business, Industry;" and "Natural Gas Safety in and Around Your Home." Other new publications include for grades 4 through 6, a guide entitled, Natural Gas Fundamentals and Safety and for kindergarten through grade 3, a guide entitled Natural Gas Fun and Safety. NEF

A nonprofit educational organization providing educational resources and training services to educators.



active educational currently has private partnerships with government nationwide. entities including an educational materials fulfillment program which provides free natural gas education materials to educators around the country. NEF also offers in-service support to sponsors and school districts. A free full-color catalog of educational resources is available free upon request.

National Geographic Society

Educational Services 1145 17th Street, N.W. Washington, DC 20036 1-(800) 368-2728

Fax: (301) 921-1575

Web: http://www.nationalgeographic.

Provides educational materials designed for the kindergarten through grade 12 earth, physical, and environmental sciences curriculum. Materials include filmstrips, videos, books, atlases, globes, software, maps, posters, Wonders of Learning kits, picture pack transparency sets, interactive videodiscs, and CD-ROM's. The National Geographic Kids Network, a telecommunications-based science curriculum for elementary school-grade levels, is also available. Free catalogs are available upon request.

A nonprofit organization.



The National Hydropower Association 122 C Street, N.W.

Washington, DC 20001 (202) 383-2530

Fax: (202) 383-2531

E-Mail: hydroinfo@aol.com Web: http://www.hydro.com

Offers a variety of materials on the production of hydropower, hydro's economic and environmental benefits, and the issues facing the hydropower industry. Posters and educational curriculum are available at nominal cost. An annual conference is held every spring, featuring a variety of educational programs. NHA works closely with the U.S. Export Council for Renewable Energy, the Fund for Water and Energy Education, and other organizations dedicated to hydropower and other forms of renewable energy. Staff is available to answer specific questions and to help identify sources of additional information. 87

An association dedicated to building greater public awareness of the advantages of hydropower as our Nation's most plentiful renewable energy source.

National Mining Association 1130 17th Street, N.W. Washington, DC 20036 (202) 463-2625 Fax: (202) 857-0135

E-Mail: nma@planetcom.com Web: http://www.nma.org

Provides educational materials on mining in the United States and the importance of minerals in our daily lives. A video, "Mining: Discoveries for Progress," and a brochure, What Mining Means to Americans, are available for a fee to the general public. Single copies are available free to a teacher requesting them on school letterhead. Other materials are available upon request. 88

A trade association representing producers of America's coal, metals, industrial minerals, and agricultural minerals; mining equipment manufacturers; and engineering, consulting, and financial institutions that serve the mining industry.



National Network of Energy and Environmental Education Professionals 302 West Hill Street

Champaign, IL 61820

(217) 359-9442 Fax: (217) 359-9446

E-Mail: educational_dividends@

compuserve.com

Web: http://www.leeric.lsu.edu/ network/network.htm

Information is available on educational materials and activities in all aspects of energy and environmental Assistance is available on questions regarding programs in your area, developing energy and environmental lessons, or integrating energy environmental information into existing Network membership available for a fee, which allows access to field-tested materials, projects strategies which can be included in your program, assistance with curriculum development, evaluation, incorporating the arts or marketing your program. Members meet annually at a Networking Conference and information exchanged through the organization's newsletter, Network News, the Network Home Page and through personal contacts. 89 A grass roots membership organization comprised of program managers in government, business, education and nonprofit organizations. Goal is to serve as an information coordinator and to promote the expansion of energy and environmental education.

National Propane Gas Association 1600 Eisenhower Lane, Suite 100 Lisle, IL 60532 (630) 515-0600 Fax: (630) 515-8774

E-Mail: npga@genie.geis.com Web: http://www.propanegas.com

Provides environmental, safety, and propane industry information in fact sheets, a coloring book, and an activity book. Also available are an Energy Costs Comparison Calculator and four propane gas student education kits: one for use in rgarten through grade 3; in grades ugh 6; in junior high school; and in 100 mg/mischool.

A national trade association comprising 3,600 companies representing all aspects of the propane industry.

National Rural Electric Cooperative Association

Communications Department 4301 Wilson Boulevard, CD10-222 Arlington, VA 22203 (703) 907-5709

Fax: (703) 907-5519 Web: http://nreca.org

Provides educational booklets and pamphlets aimed at junior and senior high school students (as well as adults). Publications include History of Rural Electrification; Energy and Electricity (includes a home safety audit); Facts About America's Rural Electric Systems; and Occupations in Rural Electrification. Publications are for sale. An order form for the materials is available upon request.

A service organization based in Arlington, VA. Represents the Nation's 1,000 nonprofit consumerowned rural electric systems, which provide electric service to more than 25 million people in 46 States.

National Science Foundation Office of Legislative and Public Affairs

4201 Wilson Boulevard, Room 1245 Arlington, VA 22230 (703) 306-1070

Fax: (703) 306-0157 E-Mail: nstw@nsf.gov

Web: http://www.ehr.nsf.gov

National Science and Technology Week (NSTW), a collaborative effort of the Foundation National Science corporate sponsors, features partnerships with community institutions schools, libraries, museums, zoos); a special focus activity encourages parents to join their children in discovering science in their everyday activities and interests. Materials include an NSTW activities" annual poster, "training packets, and "sharing science" brochures that alert the public to scientific discovery. Activities and materials promote: (1) the sharing of information

A Federal agency that supports basic science and engineering research and education.



on science curriculum and education trends; (2) developing "Science Day" activities; (3) organizing community-wide contests or events; and, (4) recruiting scientific and technical personnel to advise children about careers.

National Science Resources Center (NSRC)

Arts and Industries Building, Room 1201 Washington, DC 20560 (202) 357-4892

(202) 357-4892 Fax: (202) 786-2028

Web: http://www.si.edu/nsrc

Collects and disseminates information about exemplary science teaching resources, develops innovative science curriculum materials, and sponsors outreach activities to help school districts develop and sustain hands-on science Relevant titles include: programs. Resources for Teaching Elementary School Science, an elementary science resource guide; Electric Circuits, Magnets and Motors; The Technology of Paper; and Ecosystems, inquiry-centered curriculum units in the Science and Technology for Children (STC) elementary science 93 program.

NSRC is operated by the Smithsonian Institution and the National Academy of Sciences to improve the teaching of science in the Nation's schools.



National Science Teachers Association

Publications 1840 Wilson Boulevard Arlington, VA 22201 (703) 243-7100

1-(800) 722-NSTA Fax: (703) 243-7177

Web: http://www.nsta.org

Publishes educational products and activity books for students kindergarten through college. Titles include: Earth: The Water Planet; Water. Stones & Fossil Bones; Ten-Minute Field Trips; Energy Sources and Natural Fuels; Taking Charge: An Introduction to Electricity; Water Matters; Middle Level Energy Series; Project Earth Science: Astronomy; Project Earth Meteorology; Project Earth Science: Physical Oceanography; Project Earth Geology; Earth At Hand; Understanding Our Environment. These books are available for a fee. A free catalog is available upon request.

The largest science teachers association in the United States, working to improve the quality of science education nationwide.

National Wildlife Federation 8925 Leesburg Pike Vienna, VA 22184-0001 1-(800) 822-9919 Fax: (703) 442-7332

Web: http://www.nwf.org

Publishes Your Big Backyard, Ranger Rick, National Wildlife, and International Wildlife magazines for children and adults; produces the environmental education activity series NatureScope for educators; produces the "National Wildlife Week" Educator's Kit; and produces the Animal Tracks Activity Guide for educators, a companion workbook for children, and an Animal Tracks educator resource on the Web site listed above. Call toll-free and ask for more information on our new Schoolyard itat Program and the rest of our RIC :ational outreach programs.

A nonprofit conservation education organization. The mission of the National Wildlife Federation is to educate, inspire, and individuals organizations of diverse cultures to conserve wildlife and other natural resources and to protect the earth's environment in order to achieve a peaceful, equitable, and sustainable future.

The Natural Gas Vehicle Coalition 1515 Wilson Boulevard, Suite 1030 Arlington, VA 22209 (703) 527-3022 Fax: (703) 527-3025

Acts as a clearinghouse for information on natural gas vehicles for members and the general public. General information packets and the Member Business Guide, a list of member equipment suppliers and the products and services they provide, are available free of charge. available for a nominal fee is "The Road to Clean Air," a 12-minute educational video which features actress Lindsay Wagner describing the virtues of natural gas vehicles.

A national trade association and commercialization organization supported by gas companies, natural gas vehicle equipment suppliers, local government agencies, and other companies committed to developing profitable, long-term markets for natural gas vehicles.

New York State Geological Survey 3136 Cultural Education Center Albany, NY 12230-3136 (518) 474-5816 Fax: (518) 473-8496 E-Mail: rfakundi@museum.nysed.gov

students and teachers kindergarten through grade 12. Provides a limited number of honoraria for college-level geological research in New York State. Conducts workshops and classes in geological sciences through the New York State Museum in Albany, NY. Produces geological maps and reports for

Provides free educational leaflets for both professionals and the general A catalog of publications is available free upon request.

The mission of the New State Geological Survey is to make services available to all agencies and people of New York State; conduct geological research; and cooperate with agencies of other States, Federal Government, educational institutions, and industry in the discovery, analysis, and dissemination of geologic information.



The NoodleHead Network

107 Intervale Avenue Burlington, VT 05401 1-(800) 639-5680

(802) 862-8675

Fax: (802) 864-7135

E-Mail: noodlhed@together.net Web: http://www.noodlehead.com

Produces and distributes educational videos for kids. Specializes in energyrelated videotapes for utilities and the kindergarten through grade 12 school market. Kids play an integral role in the creation of each tape--from scriptwriting to acting to editing. Titles include: "Simple Things You Can Do To Save Energy," "Simple Things You Can Do To Save Energy In Your School," and "KnuckleHead's Electrical Safety Series." Videos are available for purchase in VHS format or with duplication and broadcast rights. Free catalogs and preview copies of the videos available upon request. 98 An educational video producer and distributor that creates videos from a kid's viewpoint.

Northeast Utilities Community Relations-Educational Programs P.O. Box 270 Hartford, CT 06141-0270 (203) 665-2752 Fax: (203) 444-4283

Provides educational services free to educators and organizations in the areas served by Northeast Utilities. Offers visits to information centers, tours, classroom presentations, nature trails and environmental education, speakers' bureau, safety presentations, film/video-and computer software-lending libraries, energy/nuclear energy curriculum and related literature, teacher workshops, and teaching kits. Booklets and posters for kindergarten through grade 12 are ble. Also has pamphlets on home

Afult text Provided by ERIC 19, and weather ization.

69

An investor-owned electric utility serving Connecticut, western Massachusetts, and New Hampshire.

Connecticut Yankee Information & Science Center
362 Injun Hollow Road
Haddam Neck, CT 06424-3099
(860) 267-9279
1-(800) 348-INFO (CT only)

Millstone Information & Science Center 278 Main Street Niantic, CT 06357 (860) 691-4670 1-(800) 428-4234 (CT only) Fax: (860) 691-4676

Northfield Mountain Recreation & Environmental Center 99 Millers Falls Road Northfield, MA 01360 (413) 659-3714 Fax: (413) 659-4460

Public Service of New Hampshire
Amoskeag Fishways Learning Center
1000 Elm Street
P.O. Box 330
Manchester, NH 03105
(603) 626-3474
Web: http://www.psnh.com

The Science & Nature Center at Seabrook Station Box 300, RT 1 Seabrook, NH 03874 (603) 474-9521, Ext. 2727 1-(800) 338-7482 (New England only) Fax: (603) 474-9521, Ext. 2782



Northern Indiana Public Service Company

Corporate Citizenship ATTN: Educational Services

5265 Hohman Avenue Hammond, IN 46320

(219) 647-6215 Fax: (219) 647-4010

E-Mail: jawillia@nipsco.com Web: http://www.nipsco.com

Provides, free to primary school and secondary school educators within its service territory, power plant tours, films, videos, publications, activity booklets, and, upon request, a *Teaching Resources Catalog*.

A regulated electric and natural gas public utility serving the northern third of Indiana.

Northern States Power Company Community and Economic Development Department 414 Nicollet Mall (RS4) Minneapolis, MN 55401 (612) 330-6677 (school-to-work)

(612) 330-6677 (school-to-work (612) 330-6538 (speakers)

(612) 330-6048 (tours)

(612) 330-7976 (energy safety demos)

Provides educational services free to educators in the areas served by Northern States Power Company. Offers visits to two nuclear plant training centers and Minnesota's largest coal-fired plant; energy and environmental education curriculum; speakers' bureau; job shadowing; and career exploration.

An investor-owned electric and natural gas utility serving parts of Minnesota, Wisconsin, North Dakota, South Dakota, and northern Michigan.



Nuclear Energy Institute 1776 I Street, N.W., Suite 400 Washington, DC 20006-3708 (202) 739-8000

Fax: (202) 785-4019 E-Mail: SEB@nei.org

Web: http://www.nei.org

Provides a variety of publications on nuclear energy issues, including the benefits of electricity generated by nuclear power, public opinion data on nuclear energy, and statistical data on nuclear energy. Complimentary packets of material are available for students and teachers. A complimentary booklet on nuclear energy is available to the general public. For more information, contact the NEI Publications Office.

The nuclear energy industry's Washington-based policy organization.

Nuclear Information and Resource Service

1424 16th Street, N.W., Suite 601 Washington, DC 20036 (202) 328-0002

Fax: (202) 462-2183 E-Mail: nirsnet@igc.org Web: http://www.nirs.org

Furnishes fact sheets on nuclear waste, safety, general information, alternative energy. Single copies are Free brochures available available. include 10 Basic Ouestions About Nuclear Power and Nuclear Power? Consider the Alternatives. The NIRS Energy Audit Manual: How to Audit Campus & City Buildings, also available for a fee, includes chapters on lighting efficiency, heating, and air conditioning designed to help students calculate energy and cost savings for their school (high school and above). Current information on nuclear industry and events is available, as well atalog of related articles. 103

A nonprofit information clearinghouse.

OG&E Electric Services Community Services P.O. Box 321 MC 1204 Oklahoma City, OK 73101 (405) 553-3015

Fax: (405) 553-3508

E-Mail: pangbor1@oge.com Web: http://www.oge.com

Provides educational materials free to educators in the areas served by OG&E Electric Services. Materials include films/videos, literature, multimedia kits with teacher/student materials. Activity booklets and a teacher resource guide are also available.

An investor-owned electric utility serving parts of Oklahoma and western Arkansas.

Ohio Oil & Gas Association 1718 Columbus Road, SW P.O. Box 535 Granville, OH 43023-0535 (614) 587-0444 Fax: (614) 587-0446 E-Mail: tstewart@ohiolinks.com

Offers the following materials: Drill Bits, a series of informational news articles concerning issues of public interest; Facts at a Glance, an informational brochure about the Ohio crude oil and natural gas industry; The Energist: Getting to Know Natural Gas (single copy); and a booklet listing educational resources of the Ohio Division of Geological Survey. Also available is a list of several hundred products made from petroleum; and activities and puzzles designed for classroom use.

Formed in 1947 to protect, promote, foster and advance the common interests of those engaged in all aspects of the Ohio crude oil and natural gas producing industry. With a membership of 1,400 members, this is one of the largest organizations of its kind in the United States.



Oklahoma Energy Resources Board 3555 N.W. 58th. Suite 430 P.O. Box 18738 Oklahoma City, OK 73154 (405) 942-5323 1-(800) 664-1301 Fax: (405) 942-3435 E-Mail: oerb@oipa.com

Provides to Oklahoma educators free of charge the following: teachers guides with classroom activities for Fueling Around and Fossils To Fuel, two sciencebased energy curriculum units for elementary and middle schools. Also sponsors 2-day teacher workshops free of charge (and reimburses school districts for substitute pay during workshops). Offers free of charge a state-wide coordinated program entitled Petroleum Professionals in Classroom. This interactive hands-on program is presented by oil and natural gas industry volunteers who bring energy facts to the classroom in 45minute presentations. Also free of charge is an oilfield safety video, "Play It Smart!." Geared to middle school students, it explains the dangers of playing around oilfield equipment. It stars members of the Dallas Cowboys football team as well as other football teams. 106

Omaha Public Power District Consumer Relations Department 444 South 16th Street Mall Omaha, NE 68102-2247 (402) 636-3747 Fax: (402) 636-3922

Provides educational services free of charge to schools in the utility's service area. Services include classroom programs and speakers, career planning information, films/videos, tours of power plants and other facilities, and

An oil and natural gas industry-funded state agency dedicated to energy education and restoring environmentally damaged orphaned and abandoned oil and gas production and exploration sites.

A public utility serving the electric needs of customers in eastern Nebraska.



literature for students and teachers in all grades. Also provides information on Omaha Public Power District's Buddy Alert and Safetysaurus Programs. All materials available upon request. 107

Pacific Gas & Electric Company
Customer Energy Management
Department
444 Market Street, Room 1634 - T16A
P.O. Box 770000
San Francisco, CA 94177
(415) 973-2232
Fax: (415) 973-4961
E-Mail: SLF1@PGE.com

Web: http://www.PGE.com

Provides the Energenius Educational Series, several complete curriculum programs focusing on energy efficiency and gas and electric safety education for grades 1 through 8. Curriculum materials are provided at no cost to schools within the service territory and can be purchased by schools, utilities, and organizations outside Pacific Gas & Electric's service territory. Energenius Educational Series comes complete with teacher curriculum guide and student activities for each student. The core of the series consists of multi-lesson classroom programs designed to engage students in active, age-appropriate learning and to relate to pace-setting curriculum standards such as those of the State of California. Games and activities can be used inside or outside the classroom and involve both young people and their families.

An investor-owned utility serving more than 4 million residential customers.



Pennsylvania Power & Light Co. Energy Education Coordinator, A9-4 Two North Ninth Street Allentown, PA 18101-1179 (610) 774-6914 Fax: (610) 774-6503

Provides free energy education teaching materials to educators in the utility's service area. Materials include kindergarten through grade 12 curriculum units (teacher workshops required), Nuclear Energy Seminar for Teachers (NEST: worth 3 continuing education credits), Teacher Environmental Awareness (TEA) workshops, electrical safety programs (including a student poster contest), a minigrant program for teachers (up to \$500 funding), Energy in Education newsletter, Electric Vehicle teachers guides (kindergarten through grade 12); Electric and Magnetic Field teachers guide (grades 7 through 12); and Electric GO-Cart Rally for a limited number of high schools. Write or call for schedules of programs or for more information. 109 An investor-owned electric utility serving all or parts of 29 counties covering a 10,000-square-mile area in central eastern Pennsylvania

Plastic Bag Association
Plastic Bag Information Clearinghouse
1817 E. Carson Street
Pittsburgh, PA 15203
1-(800) 438-5856
Fax: (412) 381-8890
E-Mail: pbainfo@aol.com
Web: http://www.plasticbag.com

Provides educational resources for elementary and middle-school educators and information for consumers to increase public understanding of the facts related to plastic bags and the environment. "Don't Let a Good Thing Go to Waste" is an environmental education program for students in grades rough 5. Its interactive, RIC sciplinary activites help students

A consortium of the industry's leading manufacturers and suppliers who work together on industry issues and focus on promoting the functional and environmental benefits of plastic bags.

discover that they can make a difference in solving solid waste challenges by practicing the 3Rs: Reduce, Reuse and Recycle. The Earth: Mission Possible poster is a colorful puzzle activity that helps elementary students become aware of ways to conserve natural resources. "An Ounce of Prevention" middle-school curriculum and its poster-lesson plan on the Life of a Hamburger comprise a complete resource for teaching the elements of waste generation and waste prevention. The full 15-activity curriculum, developed with the National Science Teachers Association and Dow Chemical Company, helps students see how many resources are consumed and how much waste is generated in dailylife activities, such as eating hamburger and choosing plastic or paper at the supermarket check-out counter. These activities help them realize the value of prevention when it comes to waste.

Consumers can obtain information on the environmental benefits of plastic in the Life of a Plastic Bag brochure and can also locate the nearest plastic bag recycling collection site by calling the above number. The above Web site provides information on plastic bags and the environmental 3Rs, as well as the lesson plans for teachers and a student puzzle activity with an Earth Day message. All materials are free.



Polystyrene Packaging Council 1801 K Street, N.W., Suite 600K Washington, DC 20006

(202) 974-5321

Fax: (202) 296-7354 E-Mail: pspc@socplas.org

Web: http://www.polystyrene.org

Offers The Polystyrene Packaging and the Environment Sourcebook, an easy-to-use reference guide for teachers that includes descriptions of available materials involving plastics and the environment. Also offers age-specific classroom activities, which were prepared with the guidance of science teachers nationwide, that look at the role of plastics in our everyday lives. One copy is available free of charge.

A nonprofit trade association dedicated to providing information about environmentally responsible meοf solid waste thods disposal for polystyrene and polystyrene recycling nationwide. programs Polystyrene **Packaging** membership Council's includes manufacturers of polystyrene polystyrene foam and rigid food service packaging, and protective polystyrene and shape-molded loose-fill packaging.

Procter & Gamble Educational Services P.O. Box 14009 Cincinnati, OH 45250-0009 (513) 945-8450 Fax: (513) 945-8979 E-Mail: true.tb@pg.com

Offers the free environmental education teaching kit "Planet Patrol" for grades 4 through 6. Materials teach students how to be a part of the solution to America's growing solid waste crisis. The teaching unit includes teacher's guide, student worksheets, and classroom poster. 112

Public Affairs Division of a consumer products company.

The Radon Group, Ltd. P.O. Box 80653 Portland, OR 97280-1653 (503) 245-7092 Fax: (503) 245-7092

Provides easy-to-use "hands-on" kits meeting Education 2000 goals. Products with all major science texts. Kits RIC in teacher guide, student masters,

Hands-on energy education program developers and distributors.

vocabulary, and hardware. Titles include the following: "Insulation Station Kit" on energy efficiency for grades 4 through 9; "Partnerships For A Work Ready America Kit," a conservation program for grades 10 through 12; "Generating Electricity Suitcase Kit" and a video "Zap Rap" on electricity safety for grades 3 through 8; "Nuclear Energy Kit" for grades 4 through 9; and "Solar Photovoltaic Suitcase Kit" and "Hydroelectricity - Water Power Suitcase Kit" for grades 3 through 8. Custom teacher in-service programs sponsored by participating utilities. Materials are provided free of charge by most utilities. Products may be purchased directly from the company. A free catalog is available. 113

Railroad Commission of Texas P.O. Box 12967 Austin, TX 78711-2967 (512) 463-7114 (TEAM materials) (512) 463-7006 (Alternative Transportation Fuels materials) Fax: (512) 463-6702 E-Mail: hurt@rrc.state.tx.us

Provides educational materials free to Texas teachers (kindergarten through grade 12) during Texas Energy Awareness Month (TEAM) September. Texas oil and gas materials include suggested lesson plans, blackline masters for bookmarks and bulletin boards, a speaker's bureau, and resource lists. Also provides free educational workshops and supplemental curriculum materials called Alternative Transportation Fuels for secondary science teachers in Texas. These materials are correlated with TAAS and essential elements and are provided to participants in the workshops only. Materials include a video called "Way Cool Fuels," posters, me and additional resources. Also (udes multi-lesson units entitled:

A State energy agency that regulates the oil and gas, alternative fuels surface mining industries in Texas. The Commission Texans serves by: stewardship of natural resources and environment, its concern personal community safety, and its support of enhanced development and economic vitality.

Energy?," "Fuels "What is Everything," "What are Alternative Transportation Fuels?," Air Pollution and Health," "Dollars and Sense," and "Technology." A teacher's guide, glossary, bibliography and a list of additional resources are provided. Workshops will be offered across Texas Participating teachers during 1997. receive extra-duty pay reimbursements for substitute Alternative Transportation Fuels is a joint Texas Railroad of the Commission, the Texas General Land Office, and the Texas Education Agency and is funded from grants from the U.S. Department of Energy, the Texas State Energy Conservation Office, and the Texas Alternative Fuels Council.

Renewable Fuels Association

One Massachusetts Avenue, N.W. Suite 820 Washington, DC 20001 (202) 289-3835

Fax: (202) 289-7519

E-Mail: etohrfa@erols.com

Web: http://www.EthanolRFA.org

Provides general information educational fact sheets free of charge on ethanol, a clean-burning, renewable fuel produced from agricultural feedstocks and wastes. Topics include "Ethanol and Clean Air," Ethanol and the Economy," "Ethanol and Agriculture," "Ethanol vs. Energy," "Ethanol's Imported Performance as a Fuel," and "Future Opportunities." Additional information is available free of charge by visiting the above Web Site or calling the above number. 115

A national nonprofit association promoting domestically produced renewable ethanol as an alternative to imported energy sources.



Renew America

1400 16th Street, N.W., Suite 710

Washington, DC 20036

(202) 232-2252

Fax: (202) 232-2617

E-Mail: renewamerica@igc.apc.org Web: http://www.crest.org/renew_

america

successful environmental Promotes programs to foster their replication and expansion. Publications available for purchase include the Environmental Success Index, a directory of more than 1,600 verified programs; and topic reports on various environmental topics. Kids! Renew America is also available free of charge.

The Nation's source for environmental solutions.

Safe Energy Communication Council 1717 Massachusetts Avenue, N.W. Suite 805 Washington, DC 20036

(202) 483-8491

Fax: (202) 234-9194

E-Mail: seccgen@aol.com

Offers a free poster with everyday suggestions on how to save the earth. Publications and graphics that deal with a variety of issues, such as nuclear power, nuclear waste dangers, global warming, energy efficiency, renewable energy, are available for a Titles nominal fee. include: MYTHBusters #8: "Low-Level" Radioactive Waste: MYTHBusters #9: Nuclear Power Economics: **MYTHBusters** International Nuclear Power; and Power Boosters: Ohio's Energy Efficiency Success Stories. Request a publications list for other titles. 117 A national nonprofit coalition fighting for environmentally safe, affordable energy.



Science Screen Report 1000 Clint Moore Road Boca Raton, FL 33487-2806 1-(800) 232-2133 Fax: (561) 241-0707

An ongoing secondary school-level videotape program that focuses on the most recent developments in science, technology, and engineering. Produced since 1970 with the active participation of Science Teachers National Association, "Science Screen Report" (SSR) is designed to stimulate student interest in the challenges, rewards, and opportunities of pursuing scientific careers. More than 550 corporations currently sponsor "SSR" to 3,000 school districts nationwide. Tapes become the permanent property of the school system to allow repeated use year after year.

118

The only videotape program made available free of charge to schools through corporate sponsors.

Science Service 1719 N Street, N.W. Washington, DC 20036 (202) 785-2255 Fax: (202) 785-1243

E-Mail: youth@scisvc.org

Web: http://www.tss-inc.com/sciserv

Science Service administers two youth programs. The International Science and Engineering Fair (ISEF) is a competition for students in grades 9 through 12. Students participate in their regional and/or State ISEF-affiliated fair. Two individual student projects and one team project of up to three students are chosen to participate in the ISEF. Participants are eligible for scholarships, scientific field trips, summer research internships, and equipment. The Westinghouse Science Talent Search awards \$205,000

Founded in 1921, a nonprofit scientific and educational organization that promotes scientific literacy, with special emphasis toward young people and, more recently, members of underrepresented groups.



in scholarships to 40 finalists. Top prize is a \$40,000 scholarship. Participants must be seniors in high school. Students submit a report of an independent research project in the sciences, official entry form, transcript, test scores, and teacher recommendations. The submission deadline can be as early as late November, but no later than early December. For an official entry form and specific deadline, contact Science Service.

119

Shell Oil Company Corporate Communications P.O. Box 2463 Houston, TX 77252-2463 (713) 241-6161

Offers Oil, a booklet describing the origin of oil and its production, conversion to thousands of products, and distribution to customers around the world. Also available are A Story of Achievement, a brief history of the Shell Oil Company, and Let's Collect Rocks and Shells. Booklets are free of charge, but quantities are limited.

Oil company department that responds to public inquiries pertaining to energy and environmental issues.

Simon and Schuster Children's Publishing Division Marketing Department 1230 Avenue of the Americas, 4th Floor New York, NY 10022 (212) 698-2806 Fax: (212) 698-4350

Offers a variety of energy, science, and environmental books from 4 imprints, including such titles as: *Nuclear Energy* by Pringle; *Weather Forecasting* by Gibbons; *The Big Storm* by Hiscock; and *Before the Sun Dies* by Gallant. Provides free catalogs.

A children's trade book publisher of both fiction and nonfiction titles for kindergarten through grade 12.

83

SME

P.O. Box 625002 Littleton, CO 80162-5002 (303) 973-9550 1-(800) SME-3132 Fax: (303) 973-3845 E-Mail: smenet@aol.com

Web: http://www.smenet.org

Offers both free and for-sale materials including classroom resource guides, posters, videos, and computer programs. Also can provide teachers with contacts among SME members in most geographic locations who are willing to help in teaching about minerals and mining.

A nonprofit educational organization providing educational resources related to energy, minerals, and mining. The Society for Mining, Metallurgy & Exploration, Inc., (SME) is the worldwide professional society for mining engineers.

Smith College Elm Street Northampton, MA 01063 (413) 584-2700 Fax: (413) 585-2075

Offers the project, An Electricity Curriculum Based on Capacitor-Controlled Transient Lamp Lighting, which reveals the physics of current propulsion. This high school electricity curriculum students in engages It includes three experimentation. instructional aids (Introductory Workshop Guide, Classroom Resources Book, and Background Information File) which enhance the teacher's own understanding of electric circuits and make the study of electricity enjoyable for 123 students.

A private academic institution.



Solar Energy Industries Association 122 C Street, N.W., 4th floor Washington, DC 20001 (202) 383-2600

Fax: (202) 383-2670 E-Mail: info@seia.org

Web: http://www.seia.org

Publishes Renewable Energy Fact Sheets, which include information and classroom activities. Also produces Solar Science Activities, which includes dozens of classroom activities for grades 5 through 9, and Energy, Technology and Society, which is geared for high school students and provides information on alternative energy technologies. All are available for a fee. A free publications catalog is available upon request. CD-ROM educational modules are available through the Solar Energy Research and Education Foundation.

A nonprofit national trade association which represents the photovoltaic and solar thermal manufacturers and component suppliers.

Solar Now Beverly High School 100 Sohier Road Beverly, MA 01915 (508) 927-9SUN E-Mail: solar19@nfi.com

Provides programs for students and educators seeking hands-on renewable energy education. Based at one of the Nation's largest photovoltaic sites, our field study center also hosts a 10kW windmill and an interactive classroom. Field trips to the site are free and may be arranged by calling the above number. The following are also available: comprehensive teacher education workshops, summer internships college students, a library of renewable energy activities, and conferences. 125

A national nonprofit organproviding ization education about all forms of renewable energy to teachers. students. environmentalists.



Steel Recycling Institute 680 Andersen Drive Pittsburgh, PA 15220-2700 1-(800) 876-7274 Web: http://www.recycle.steel.org

Provides materials for primary, middle secondary school educators. Materials include Nature's for ME, a preschool teacher's guide filled with exercises; interactive nature-related "YES I CAN!," a video and teacher's guide for grades 1 through 3; "Roscoe's Totally Cycled World," a new middle CD-ROM with interactive missions in science, language arts, math and social studies; and "Cycles for Science," high school curriculum supplements for Biology, Chemistry, Physics and Earth/Life Science, and a community volunteer activities guide to support the program. Information and prices are available through order forms. Additional materials such as activity sheets (black sheet masters), a coloring poster, and a wall poster are available. Please indicate grade level(s) for which materials or order forms are needed.126

An industry association dedicated to promoting and sustaining steel recycling across the country.

The Sugar Association, Inc. 1101 15th Street, N.W., #600 Washington, DC 20005 (202) 785-1122 Fax: (202) 785-5019

Offers Sugar Science: Photosynthesis to Food, a computer software package that explains the processes of photosynthesis and respiration as well as the role of plants in the food chain. This interactive software also provides experiments on sugar's functional role in food processing, including yeast interaction (baking), preservation (jams and preserves) and freezing (ice cream). The

Established in 1943, the Sugar Association maintains an active role in informing the public about the role that sugar can play, in moderation, in a healthful diet. By creating public education programs with a variety of diet, health, fitness nutrition, and materials, the Association has worked to dispel misconceptions about sugar as well as provide opportunities for continued scientific research.



program, available for a fee, was reviewed by the National Science Teachers Association and is available in the following formats: Apple IIe, Apple IIGS, IBM, Macintosh, IBM Novell, and AppleShare. Accompanying the software is a teacher's manual that includes a user's guide for the software and explanations of the experiments, including objectives, additional data and definitions, and extension activities for students. Recommended for upper elementary/middle school students.

127

Troll School and Library L.L.C. 100 Corporate Drive Mahwah, NJ 07430 (201) 529-4000 Fax: (201) 529-1862

Publishes educational materials for students from kindergarten through grade 8. Includes a complete line of science materials relating to life, earth and physical sciences. Some of the energy-related titles are Electricity; Energy and Fuels; Wonders of Energy; World of Weather; and Discovering Electricity. Science Thematic Units are also available for children from prekindergarten through grade 6. Materials may be purchased from the publisher. Free catalogs are available upon request. 128

A publishing firm specializing in children's books.

Union of Concerned Scientists Two Brattle Square Cambridge, MA 02238-9105 (617) 547-5552 Fax: (617) 864-9405 E-Mail: ucs@ucsusa.org Web: http://www.ucsusa.org

Experiment of Materials include and briefing papers on renewable

An independent, nonprofit organization of scientists and other citizens concerned about the impacts of advanced technology on society.

energy, transportation policy, global warming, nuclear power sustainable agriculture, and arms control. Free brochures are available, such as Solar Power, Energy on the Road, Nuclear Power, Renewable Energy and Developing Countries, and World Scientist Warning to Humanity. Our newest book Renewables Are Ready: People Creating Renewable Energy Solutions describes how people across the country-from rural farm communities to large cities--have put renewable energy to work in their businesses. homes. schools, and Teachers can purchase a 100-page multidisciplinary guide to teaching renewable energy in grades 7 through 12, as well as a collection of eight posters on renewables and a renewable energy slide show.

University of California-Los Angeles Graduate School of Education 405 Hilgard Avenue Los Angeles, CA 90025 (213) 825-4321

This project involves secondary school master science teachers from the Los Angeles area in the creation of two cross-curricular, multilevel modules that focus on environmental science. Collaboration involves UCLA, area community colleges, and middle school and high school faculty. National Science Foundation support for this project began in 1993; some materials are still under development.

A State-run, academic institution.



University of Florida Center for Economic Education 186 Norman Hall Gainesville, FL 32611-2053 (352) 392-0971

Fax: (352) 392-7159 E-Mail: econ_ed@afn.org

Web: http://www.coe.ufl.edu/CEE/ cee.html

Provides curriculum guides for teachers. Available for a fee are the Energy and Economics (high school); Resources and Energy (grades 2 and 3); and Resources and Energy (middle school) curriculum guides designed to give students a greater understanding of the connections between energy and economics. Bulk orders of 100 or more copies can be purchased at a discount.

A university center responsible for providing educational materials to teachers.

University of Illinois at Urbana-Champaign School of Architecture-Building Research Council (BRC) 1 East St. Mary's Road Champaign, IL 61820 1-(800) 336-0616 Fax: (217) 244-2204

E-Mail: pmiebach@uiuc.edu Web: http://intrados.arch.uiuc.edu/

research/brc/index.html

Publishes 8-, 12-, and 16-page booklets on how to make homes comfortable, healthy, and energy efficient, which are appropriate for home owners and seniors in high school. BRC offers the following publications at a nominal fee: Home Inspection, which examines each home system--plumbing, electrical, etc., and provides a checklist for buying a home; Lighting, which focuses on task, security, and general lighting; Energy Management, which outlines practical management for summer and winter; Insulating, focuses on how to know what type how much insulation is needed 9 A nonprofit information clearinghouse and research center.

Heating, which is about the various kinds of heating systems and how to select a Selecting Windows, explains window options and energy savings by selecting wisely; and Moisture Condensation, which discusses how to keep moisture from making a home chilly and prone to water damage. Energy Management is available in Spanish. A free publications catalog is available upon request. A complete set of 27 booklets is available for instructors and home owners. Bulk rates are 132 available.

University of Maryland-College Park Physics and Astronomy Department College Park, MD 20742 (301) 454-3311

Teacher enhancement opportunities were designed for middle school teachers in acoustics, optics, electricity, and Newton's laws. Manuals provide detailed discussion of a series of experiments which can be performed with selected apparatuses. National Science Foundation support for this project began in 1991; some materials are still under development. 133

A State-run, academic institution.

U.S. Consumer Information Center Pueblo, CO 81009 (719) 948-4000 Fax: (719) 948-9724

E-Mail: Catalog.pueblo@gsa.gov Web: http://www.pueblo.gsa.gov

Offers the free, quarterly Consumer Information Catalog containing listings of over 200 free and low cost Federal consumer publications on topics such as health, energy conservation, Federal benefits, money management, housing,

Helps Federal agencies develop, promote, and distribute consumer information to the public through the Consumer Information Catalog.



child care, employment, small business, education, food and nutrition, and more. A free catalog is available by writing to: Free Catalog, Pueblo, CO 81009.

Bulk copies are available to schools and nonprofit groups able to distribute 20 or more copies. 134

U.S. Department of Agriculture
Forest Service
Rocky Mountain Forest and Range
Experiment Station
240 W. Prospect Street
Fort Collins, CO 80526
(970) 498-1500
(970) 498-1719 (publications distribution)
Fax: (970) 498-1660

Provides copies of technical publications on ecosystem component interactions, resource management and protection, resource interactions, and people's values and interactions with ecological systems. Available publications include: Distribution of Abandoned and Inactive Mines on Forest Service Lands and Energy and Industries in National, Regional, and State Economies.

Forest Service research is intended to serve society by developing and communicating the scientific information and technology needed to protect, manage, and use the natural resources of forests and rangelands.

U.S. Department of Commerce
National Oceanic & Atmospheric
Administration (NOAA)
Office of Public Affairs
14th & Constitution Avenue, N.W.
Room 6013
Washington, DC 20235
(202) 482-6090
Web: http://www.noaa.gov

Provides free of charge to students, teachers, librarians, and the general public information about the earth's oceans and atmosphere including the soft of endangered marine mammals, of earth hazardous weather, NOAA

A Federal agency with programs to advance the Nation's science education goals by expanding and enhancing the scientific competence of all students, teachers, and the general public.

weather radio, coastal management, civilian satellites, and global warming. Information about NOAA's educational programs, like the Teacher at Sea, is also available from this office.

136

U.S. Department of Education ERIC Clearinghouse for Science, Mathematics, and Environmental Education 1929 Kenny Road Columbus, OH 43210-1080 (614) 292-6717 1-(800) 276-0462 Fax: (614) 292-0263

E-Mail: ericse@osu.edu Web: http://www.ericse.org

ERIC/CSMEE, sponsored by the Office Educational Research Improvement, U.S. Department Education, has as its primary function the acquisition and dissemination of printed materials related to science, mathematics, and environmental education. The information is indexed and abstracted for inclusion in two monthly publications, Resources Education (RIE) and Current Index to Journals in Education (CIJE). RIE provides abstracts for a variety of educational materials; CIIE announces journal literature. In addition to acquiring and processing documents and journal articles, the ERIC/CSMEE staff produces digests and other documents. Digests are short publications (one page, front and back) on a single topic. publications include yearbooks, source books, reviews of research, instructional activity collections on broad topics, and collections of papers presented national meetings. The Clearinghouse offers a variety of user services and One of 16 ERIC clearing-houses, the ERIC Clearing-house for Science, Mathematics, and Environmental Education (ERIC/CSMEE) develops, maintains, and makes accessible to the public the world's largest education-related database which includes over 850 items relating to energy education.



maintains a full ERIC microfiche collection, RIE and CIJE reference collection, and a library collection of materials related to the scope areas. The Clearinghouse also provides a variety of electronic services on the Internet. A Gopher server can be accessed at: gopher.ericse.ohio-state-edu and a World Wide Web server can be accessed at: http://www.ericse.org.

U.S. Department of Education Office of Educational Research and Improvement (OERI) 555 New Jersey Avenue, N.W. Washington, DC 20208-5461 (202) 219-1556 1-(800) 424-1616 Fax: (202) 219-1321

E-Mail: library@inet.ed.gov Web: http://www.ed.gov

Publishes a series of Helping Your Child books for parents. Included is Helping Your Child Learn Geography, which helps children look at the world in which they live, the effects of the environment on the way in which towns have developed, and the effects humans have had on the environment that have made areas livable. Other series topics include: Science, Math, History, Reading, Using the Library, Get Ready for School, Succeed in School, Responsible Behavior, and Being Healthy and Fit. All are available for a nominal fee. To obtain ordering instructions for all of the Helping Your Child books, write to Helping Your Child List, OERI Media and Information Services, at the above address. Write to the above address to obtain the OERI Bulletin, a free quarterly listing of publications, programs, statistics, and grants. 138 Provides information about education research, statistics, publications, and data sets.



U.S. Department of Energy Argonne National Laboratory Division of Educational Programs 9700 South Cass Avenue Argonne, IL 60439-4845 (630) 252-4114

Fax: (630) 252-3193

E-Mail: bowen@dep.anl.gov Web: http://www.dep.anl.gov

Provides four continuing programs for kindergarten through grade 12 teachers as follows: (1) The Argonne Community of Teachers, a local organization of teachers who have participated in ANL programs in the past and who continue to work with the laboratory to improve science education for schools in the Chicago area. The group maintains a Web site: http://kiwi.dep.anl.gov/. Also on this site are curriculum for the Bill Kurtis New Explorers episode, "Atoms for Piece," which chronicles the development of reactors and nuclear energy. (2) Curriculum and video tapes for the PBS series "The New Explorers" have been developed by museums and DOE laboratories across the Nation. The guides are designed to encourage students to consider science careers and to provide good science activities. The guides and videos are available for a fee through PMI Films, 1-(800)-343-4312. (3) Inc. Educational Networking Consortium is a training and internet access organization that attempts to train and connect Chicago area teachers to the internet using a collection of dial-in sites in collaboration with the Illinois State Board of Education. (4) NEWTON, The Science Teachers Bulletin Board, offers a place where teachers and students can discuss education and ask questions of practicing scientists. The bulletin board can be reached by telnet at newton.dep.anl.gov web browser at //kiwi.dep.anl.gov/newton/newtonpg. 139 A DOE-funded multipurpose national laboratory providing programs to promote science careers and improve science education.

94

U.S. Department of Energy Biofuels Feedstock Development Program Oak Ridge National Laboratory P.O. Box 2008 Oak Ridge, TN 37831-6422 (423) 576-5132 Fax: (423) 576-8143

E-Mail: are@ornl.gov Web: http://www.esd.ornl.gov/bfdp

Provides free information on biomass, specifically fast growing trees and grasses, for use as raw materials for conversion to transportation fuels and electricity. The information is in the form fact sheets, reports, bibliographies. A newsletter, Energy Crops Forum, is published periodically. In addition, a World Wide Web/Internet the Biofuels Information service, Network, contains full text of many of the reports, newsletters, and fact sheets and provides pointers to other places with related materials.

U.S. Department of Energy
Bonneville Power Administration
Community Education Program-APPP
P.O. Box 3621
Portland, OR 97208-3621
(503) 230-3709
Fax: (503) 230-5884
E-Mail: jhmcnamara@bpa.gov
Web: http://www.bpa.gov

Participates in a variety of education programs in the BPA four-State service area. Various programs, which are available in some areas for teachers and students from primary school through high school, include math and science enhancements, hands-on learning, worksite mentoring apprenticeships, competitions, environmental education, tutoring, and others. Educational materials loaned or n free of charge to teachers in BPA's EKICice territory (Oregon, Washington,

o and Western Montana) include

A DOE-funded program that supports research, analysis, and communication activities to foster the development and adoption of alternative fuels.

Bonneville Power Administration (BPA) is both an electric utility and a Federal agency within Established in 1937, BPA markets power electric from Federal dams and other energy resources in the Pacific Northwest. BPA employs approximately 3,000 persons in Idaho, Montana, Oregon, Washington. The majority work in the Portland-Vancouver metropolitan headquarters control center. BPA works with business, several school, and government agency partnerships. Many employees volunteer each year for various programs.

curricula, activity, and storybooks; posters; videotapes; and exhibits. Topics covered are primarily electricity, energy conservation, and fish and wildlife. 141

U.S. Department of Energy
Carbon Dioxide Information
Analysis Center (CDIAC)
MS-6335, Building 1000
Oak Ridge National Laboratory
P.O. Box 2008
Oak Ridge, TN 37831-6335
(423) 574-0390
Fax: (423) 574-2232
E-Mail: cdiac@ornl.gov
Web: http://cdiac.esd.ornl.gov/

reports and fact sheets, Provides newsletter. CDIAC including Communications, which describes CDIAC and DOE initiatives in global change research. Trends: A Compendium of Data on Global Change, a quick source of frequently requested data, is also available. Global Change Acronyms and Abbreviations is a new publication providing a comprehensive listing of acronyms and abbreviations used in global change research, policy, and education settings. Glossary: Carbon Dioxide and Climate contains a glossary of CO₂-related terms and tables information related to CO₂ and climate. These materials are suitable for middle school and high school students. All are free. Four-page DOE Research Summary briefs are available, as well as a PC model on global energy-CO₂ emissions. The IEA/ORAU Long-Term Global Energy Economics Model with CO, CH₄ Emissions is a PC-version of a computer model package, suitable for high school and college students, with a number of variables to interactively produce CO₂ and CH₄ emission scenarios for 1975 through 2100. 142 A DOE-funded program that provides information support to the international research, policy, and education communities for evaluation of issues related to climate change.



U.S. Department of Energy Clean Cities Hotline P.O. Box 12316 Arlington, VA 22209 1-(800) CCITIES or (224-8437) (703) 528-1222

Fax: (703) 528-1953 E-Mail: ccities@nrel.gov

Web: http://www.ccities.doe.gov

Provides implementation and technical information on the DOE's Clean Cities program. Helps communities convert to alternative-fuel vehicles through coordination planning. Also provides general information on the Clean Cities Program, lists of involved cities and participants, as well as technical and regulatory information of use to Clean Cities, such as funding alternative-fuel vehicles and information on the Clean Air Act and Energy Policy Act. Remains in direct contact with the Clean Cities Program Directors, DOE regional offices, and involved Clean Cities. The Hotline is available between 9 a.m. and 6 p.m., eastern standard time. The toll-free 800 number is available to callers in the United States only.

U.S. Department of Energy
Energy Efficiency and Renewable
Energy Clearinghouse (EREC)
P.O. Box 3048
Merrifield, VA 22116
1-(800) DOE-EREC or (363-3732)
1-(800) 273-2955 (bulletin board service)

Fax: (703) 893-0400 E-Mail: doe.erec@nciinc.com

Provides information on renewable energy and energy-efficient technologies to consumers, teachers, and students. Maintains lists of organizations that will supply educators with energy-related booklets, audio-visual materials, software, bibliographies, project contacts, and equipment. Publications ERIC ble for primary school and

Autor route tree available.

The Clean Cities Hotline, sponsored by DOE, provides information on the Clean Cities Program--a voluntary and cooperative effort to promote alternative-fuel vehicles.

A DOE-funded energy information service responding to public inquiries on the use of renewable energy and energy conservation.

97

Teachers and librarians may request activity lists, bibliographies, background materials. Publications are free.

U. S. Department of Energy Federal Energy Technology Center FETC-MGN P.O. Box 880 3610 Collins Ferry Road Morgantown, WV 26507-0880 (304) 285-4473 Fax: (304) 285-4292 E-Mail: DBOGGS@METC.DOE.GOV

FETC-MGN hosts the West Virginia Regional Science Bowl. The bowl is academically competitive among 16 teams of 5 students from across the State. the progresses on to competition. Various teacher workshops are held to assist the local school system and teachers in evaluating approaches and curriculum materials for "hands on" teaching of scientific concepts and methods. FETC-MGN assists with the development of "science and energy modules" for use in school visits or Center tours. Area Girl Scouts host guest speakers from the Center to demonstrate hands on activities during summer 145 camps.

The winner of the competition national

U. S. Department of Energy Federal Energy Technology Center **FETC-PGH** P.O. Box 10940 626 Cochrans Mill Road Pittsburgh, PA 15236-0940 (412) 892-4826 Fax: (412) 892-4158 E-Mail: GRAY@PETC.DOE.GOV

FETC-PGH provides free materials for -3 through 5 that include extensive RICies and teacher lesson plans. The materials were developed as a joint

A Federal fossil energy research facility.

A Federal fossil energy research facility.

project between Pittsburgh scientists and teachers in the Elementary Teacher Research Internship Program. The materials include a booklet entitled Coal: Energy for Home and Community," laboratory activities, support information, discussion ideas, and overhead masters for viewgraphs on coal as well as solar and wind energy sources.

146

U.S. Department of Energy Los Alamos National Laboratory Science Education Program Office MS F671 Los Alamos, NM 87545

(505) 667-8680 Fax: (505) 665-6871 E-Mail: dgill@lanl.gov

Web: http://www.education.lanl.gov

Offers 25 different educational programs for students, teachers and the public, for elementary through university levels. They include teacher enhancement workshops, student participation programs, technology integration, and curriculum development, in areas of science, engineering, math technology. Some programs are national in scope, while others are regional or local. Each of the programs is described at the above Web site address.

Products available include: Science at Home, a book of science experimental activities for elementary and middle school students and parents to do together using commonly available materials; Risks, Rewards and Responsibilities, a curriculum module for high school teachers that uses the subject of radiation to look at the broader issue of risk assessment; and Hydrogen and the Materials of a Sustainable Energy

A DOE-funded national laboratory.



Future, a notebook of experiments and demonstrations for teachers that were presented at the National Educator's Workshop: UPDATE 96. Other materials may be available from time to time, and are announced on the Web site.

147

U.S. Department of Energy National Alternative Fuels Hotline P.O. Box 12316 Arlington, VA 22209 1-(800) 423-1DOE or (423-1363) (703) 528-3500 Fax: (703) 528-1953

E-Mail: hotline@afdc.nrel.gov Web: http://www.AFDC.DOE.GOV

information vehicle Provides on conversion technology, refueling station locations, and Federal alternative fuel programs. Free publications and data are available on alternative fuel technology, legislative and regulatory changes, and other issues concerning the alternative transportation fuel industry. In addition, NAFH works directly with the National Renewable Energy Laboratory's Alternative Fuel Data Center (AFDC). Data on vehicle emissions, performance, fuel economy, maintenance, and more are available through the AFDC. For more on alternative fuels and the AFDC, call NAFH's toll free number.

The National Alternative Fuels Hotline (NAFH) is sponsored by DOE to assist the general public and interested organizations in improving their understanding about alternative transportation fuels.



U.S. Department of Energy

National Energy Information Center (NEIC), EI-30

Energy Information Administration 1000 Independence Avenue, S.W.

Room 1F-048

Washington, DC 20585

(202) 586-8800

Fax: (202) 586-0727

E-Mail: infoctr@eia.doe.gov Web: http://www.eia.doe.gov

Available free of charge is an "Energy INFOcard," a quick-reference card providing the most recent annual domestic and international energy data; Energy Education Resources: Kindergarten through 12th Grade; and Energy Information Sheets, a booklet comprising one-page capsules on such energy topics as petroleum, natural gas, coal, and renewable energy. All three products are also available on EIA's award-winning World Wide Web site, which also features hundreds of links to other energy-related sites, an energy quiz, an interactive query system that allows you to tap directly into selected EIA data, an energy calendar listing events and activities, and EIA publications and data bases covering the various energy sources. 149

U.S. Department of Energy
National Low Level Waste Management
Program, EM-35/TREV
Office of Environmental Management
19901 Germantown Road
Germantown, MD 20874-1290
(301) 903-7177
Fax: (301) 903-7451

Provides general information on low level radioactive waste management through short fact sheets, a booklet with answers to frequently asked questions on low level radioactive waste disposal, and brochures on what constitutes comial low level waste; concepts for RIC sal of low level waste; and low level

NEIC is the information dissemination service for DOE's Energy Information Administration, which is responsible for the collection, analysis, and distribution of energy statistics.

A Federal program providing both general and special technical assistance to States and regions to establish an effective nationwide system for the disposal of commercial low level radioactive waste.

101

U.S. Department of Energy National Renewable Energy Laboratory Education Programs 1617 Cole Boulevard 17/4 Golden, CO 80401 (303) 275-3044

Fax: (303) 275-3076 Web: http://www.nrel.gov

Maintains a library of educational materials on renewable energy for kindergarten through university level classes and provides informational materials on renewable energy to students and teachers at all levels. Also manages and/or hosts several renewable energy and science educational programs such as the Junior Solar Sprint, a hands-on science program for students in grades 6 through 8 to design and build a model solar car.

A DOE-funded national laboratory that promotes renewable energy and energy efficiency sources and uses.

U.S. Department of Energy
Office of Civilian Radioactive
Waste Management
Planning and Administration Division
RW-54
1000 Independence Avenue, S.W.
Room GF-277
Washington, DC 20585
(202) 488-6720
1-(800) 225-NWPA
Fax: (202) 488-6721
Web: http://www.rw.doe.gov

Furnishes a curriculum, Science, Society, and America's Nuclear Waste, to educators free of charge. The four-unit curriculum, designed for use in grades 8 through 12, contains materials for both students and teachers. Student materials include readings, review exercises, and activities. For teachers, supplemental teaching aids include videotapes, computer software, and viewgraphs. Also available is general information on the

A Federal program established to manage and dispose of the Nation's spent nuclear fuel and high level radioactive waste.



Civilian Radioactive Waste Management Program, including fact sheets, brochures, videotapes, and a semiannual newsletter. All publications and videotapes are free upon request. 152

U.S. Department of Energy Office of Fossil Energy Communications, FE-5 1000 Independence Avenue, S.W. Room 4G-085 Washington, DC 20585 (202) 586-6503 Web: http://WWW.FE.DOE.GOV

Offers Dinosaurs and Power Plants, a three-document teaching set that relates the story of mining and drilling for coal, gas, and oil; environmental concerns; and modes of transportation. Included are two teaching guides and a booklet for students. All are free.

A Federal Office providing technical and public education-related information on coal, oil, and natural gas technologies, and the Nation's petroleum reserves.

U.S. Department of Energy
Office of Nuclear Energy, Science and
Technology
Office of Planning and Analysis, NE-20
Washington, DC 20585
(301) 903-6590
Fax: (301) 903-1637

Offers energy educational materials, including historical and current factual data on nuclear energy. Pamphlets discuss such issues as the nuclear fuel cycle and civilian uses of nuclear energy. Available publications include: The History of Nuclear Energy, Atoms to Electricity, The Harnessed Atom, and several others. Also provides a booklet listing nuclear power plants, with operating data. All publications are free.

Public Information Office for the Office of Nuclear Energy, Science and Technology. Responds to public inquiries about DOE's civilian nuclear energy program.



U.S. Department of Energy Office of Scientific and Technical Information P.O. Box 62 Oak Ridge, TN 37831 (423) 576-8401 Fax: (423) 576-2865

E-Mail: usertalk@adonis.osti.gov

Provides pamphlets on various energy-related subjects as available and as directed by the program offices. Many publications are free. Also provides electronic access to departmental information through the DOE Home Page at the World Wide Web Server URL http://www.doe.gov on the Internet. This server can also be reached by dial-up through a modem at (423) 241-3901.

The Office of Scientific and Technical Information (OSTI) is responsible for the management of DOE's scientific and technical information. OSTI works with DOE's program offices in making energy-related information available to the public.

U.S. Department of Energy Southwestern Power Administration P.O. Box 1619 Tulsa, OK 74101 (918) 595-6600 Fax: (918) 595-6656

Provides tutoring and special project assistance to a local magnet middle school. Also provides a limited number of educational/informational publications, designed for elementary schoolage children, on safe play around electrical sources.

A DOE power marketing administration serving the six-State area of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas.



U.S. Department of Energy Western Area Power Administration P.O. Box 3402 Golden, CO 80401 (303) 275-1739 Fax: (303) 275-1717

E-Mail: buntin@wapa.gov

Provides contact points with WAPA's customers regarding on-going energy educational efforts on conservation and renewable energy for students from kindergarten through grade 12. information, call the Energy Services Manager in any of the following cities: Billings, Montana, (406) 247-7392; Loveland, Colorado, (970) 490-7227; Phoenix, Arizona, (602) 352-2655; Sacramento, California, (916) 353-4435; and Salt Lake City, Utah, (801) 524-5495, or the Division of Energy Services in Golden, Colorado. 157 A DOE power marketing administration encompassing all or parts of 15 western States.

U.S. Department of the Interior
Bureau of Land Management (BLM)
1849 C Street, N.W.
Washington, DC 20240
(202) 452-5128 (Public Affairs)
(202)452-0378 (Minerals Outreach Coordinator)

Fax: (202) 452-0399 Web: http://www.blm.gov/

Provides materials on energy and mineral resources found on Government-owned land. BLM has an active program for presentation of energy and minerals sciences, especially as they relate to the public lands. Exhibits may be arranged for professional functions or fairs. Presentations at local schools or youth gatherings can be arranged through any BLM office or through the Minerals

regulatory agency responsible for management of a wide variety of resources on These public lands. resources include wildlife habitat, recreational values, cultural and historic sites. and wilderness scenic, areas as well as more than types of minerals produced from public lands.



Outreach Coordinator in Washington, Demonstration areas showing preservation and reclamation techniques may be used as field trips for students. several offers videos Also preservation of ecosystems Pamphlets, brochures, reclamation. maps, fact sheets, environmental studies, and statistical summaries are available free upon request or for a minimal BLM is also active in the charge. preservation of old mining towns, and tours of these "ghost towns" may be arranged.

U.S. Department of the Interior Minerals Management Service (MMS) 1849 C Street, N.W. Washington, DC 20240 (703) 787-1080 Fax: (703) 787-1010 or (703) 787-1186 Web: http://www.mms.gov

Provides informational materials on gas, oil, mineral, and environmental resources in the ocean. Available materials include color photo posters, brochures, fact sheets, statistical summaries, technical reports, newsletters, environmental studies, and professional papers. Most material is free upon request, but quantities may be limited. MMS has an extensive color slide collection, and arrangements may be made for loans or duplications at cost. Most information is suitable for upper grade levels.

MMS is a regulatory agency responsible for balancing energy and mineral resource development with protection of environmental resources on the U.S. Outer Continental Shelf.



Offices in Washington, DC; New Orleans. Louisiana: Camarillo. California; and Anchorage, Alaska, can arrange for presentations at local schools on the work conducted at MMS and on geology, environmental science, engineering, resource management, international activities, and related topics. Several video programs are available on loan, including interactive video. MMS professionals have worked with schools to develop their energy and environmental resource Call or write for further curricula. information and referral or to ask for a catalog of publications.

U.S. Environmental Protection Agency (EPA)

Public Information Center, 3404 401 M Street, S.W. Washington, DC 20460 (202) 260-2080

Fax: (202) 260-6257

E-Mail: public-access@epamail.epa.gov

Provides free material on drinking water, air quality, pesticides, radon, indoor air, Superfund, wetlands, and other environmental topics.

160

Public Information Center for EPA. Responds to public inquiries about environmental issues and EPA programs. Also serves as the main referral point for the Agency.

Videodiscovery, Inc. 1700 Westlake Avenue N., Suite 600 Seattle, WA 98109-3012 1-(800) 548-3472 (206) 285-5400 Fax: (206) 285-9245 Web: http://www.videodiscovery.com

Developer and publisher of multimedia programs for kindergarten through college-level science education. Specifically, the company publishes An educational software publisher.



interactive science videodiscs, CD-ROMs, and computer software, such as STS Science Forums; Understanding Earth; Chemistry at Work; Science Sleuths; and Physics at Work. The company is dedicated to improving science instruction through the advancement of educational technologies. A free catalog of products is available upon request. 161

Water Environment Federation 601 Wythe Street Alexandria, VA 22314-1994 (703) 684-2400 1-(800) 666-0206 Fax: (703) 684-2492 E-Mail: lloken@wef.org

Web: http://www.wef.org

Publishes The Water Sourcebook, with over 60 hands-on classroom activities; the Water Environment Curriculum Program, including units on wastewater (also available in Spanish), surface water, groundwater (also available in Spanish) and water conservation. Many of the water quality experts act as classroom resources through the WEF Adopt-A-School program. Local members choose to "adopt" schools by providing guest speakers, presentations, and tours of water treatment plants, plus videos and other special resources. For more information on these and all of WEF's public materials education brochures, call the toll free number.

A not-for-profit technical and educational group of water quality experts with more than 41,000 members located in all 50 States and around the world.



162

Waverly Light and Power 1002 Adams Parkway P.O. Box 329 Waverly, IA 50677 (319) 352-6251 Fax: (319) 352-6254

Provides educational services free to educators within its service territory. Services include generating plant tours, classroom presentations, and purchased reference materials for kindergarten through grade 12.

A municipal utility serving electric needs of the community.

Westinghouse Electric Corporation Energy Systems Communications Department P.O. Box 355, Bay 216 E Pittsburgh, PA 15230-0355 (412) 374-6803

Provides energy-related materials to all who are interested, especially to teachers and to students who will make our energy decisions in the future. A few copies of the booklets are available free charge. However, for larger quantities, there is a fee. Materials available are: a simulated uranium fuel pellet; Electricity from Nuclear Energy; Nuclear Energy Glossary; Questions Kids Ask About Energy, Radiation Booklet; and Component Illustrations (color prints). For more information, you may contact the Communications Department of the **Energy Systems Business Unit.**

A company dedicated to providing high quality products, services, technology, systems, and management in nuclear energy, as well as advanced energy and process control systems.



Wisconsin Public Service Corp. 600 N. Adams

P.O. Box 19002

Green Bay, WI 54307-9002

(414) 433-1433

Fax: (414) 433-5741

Web: http://www.wpsr.com

Provides a wide array of free energypresentations. videos, teaching kits to publications, and educators kindergarten through grade 12, students and community groups. Our materials emphasize safety, energy management, environment, renewable energy. Other services include tours, scholarships for teachers students, school-to-work and opportunities, speakers bureau, teacher workshops, electric and demonstrations. Write or call to receive complete list of our education programs.

WPSC provides electricity, natural gas, and energy products to more than 400,000 customers in an 11,000 square-mile area of Northeast Wisconsin and Upper Michigan. In addition to our corporate headquarters in Green Bay, we operate fossil, nuclear, and hydroelectric generating plants and have 19 customer centers service throughout our territory.



SUBJECT INDEX

The subject index is arranged alphabetically by specific energy terminology. References are to the organization number, the bold number that follows each entry.

COAL

Alliance to Save Energy, The, 2

American Coal Foundation, 6

American Nuclear Society, 10

Baltimore Gas and Electric Company (BGE), 21

Center for Energy and Economic Development (CEED), The, 27

Channing L. Bete Publishing Co., Inc., 29

City Public Service, 32

Dayton Power & Light Company, 38

Educational Development Specialists, 47

Energy Source Education Council, 48

Enterprise for Education, Inc., 49

Houston Lighting & Power Company, 64

Illinois Department of Commerce and Community Affairs, 65

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Kissimmee Utility Authority (KUA), 74

Mineral Information Institute (MII), 77

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Mining Association, 88

National Science Teachers Association, 94

Northeast Utilities, 99

Northern Indiana Public Service Company, 100

Northern States Power Company, 101

OG&E Electric Services, 104

Pennsylvania Power & Light Co., 109

Railroad Commission of Texas, 114



SME, 122

U.S. Department of Agriculture

Forest Service, 135

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Federal Energy Technology Center - Pittsburgh, 146

Federal Energy Technology Center - Morgantown, 145

National Energy Information Center (NEIC), 149

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

Wisconsin Public Service Corporation, 165

ELECTRICITY

Alliance to Save Energy, The, 2

American Association for Vocational Instructional Materials, 4

American Coal Foundation, 6

American Nuclear Society, 10

American Public Power Association, 13

American Wind Energy Association, 16

Bakken Library and Museum, The, 20

Baltimore Gas and Electric Company (BGE), 21

Bullfrog Films, 24

California Energy Commission, 25

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Charles Edison Fund, 30

City Public Service, 32

Culver Company, 37

Dayton Power & Light Company, 38

Disney Educational Productions, 40

Edison Electric Institute (EEI), 45

Edison Plaza Museum, 46

Educational Development Specialists, 47

Energy Source Education Council, 48



Enterprise for Education, Inc., 49

EV Media, 51

Florida Power & Light Company, 55

Frey Scientific, 58

General Atomics Sciences Education Foundation, 59

Geothermal Education Office, 60

GPU Energy, 62

Hawaiian Electric Company, Inc., 63

Houston Lighting & Power Company, 64

Illinois Department of Commerce and Community Affairs, 65

Integrated Waste Services Association, 69

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Kissimmee Utility Authority (KUA), 74

Learning Works, The, 75

Mineral Information Institute (MII), 77

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Hydropower Association, The, 87

National Science Resources Center (NSRC), 93

National Science Teachers Association, 94

NoodleHead Network, The, 98

Northeast Utilities, 99

Northern Indiana Public Service Company, 100

Northern States Power Company, 101

Nuclear Energy Institute, 102

Nuclear Information and Resource Service, 103

OG&E Electric Services, 104

Omaha Public Power District, 107

Pennsylvania Power & Light Co., 109

Radon Group, Ltd., The, 113

Science Screen Report, 118

Science Service, 119

SME, 122

Smith College, 123

Troll School and Library L.L.C., 128

U.S. Consumer Information Center, 134

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Bonneville Power Administration, 141

Clean Cities Hotline, 143

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

Federal Energy Technology Center - Morgantown, 145

Federal Energy Technology Center - Pittsburgh, 146

Los Alamos National Laboratory, 147

National Alternative Fuels Hotline, 148

National Energy Information Center (NEIC), 149

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

Southwestern Power Administration, 156

Western Area Power Administration, 157 Union of Concerned Scientists, 129

University of Illinois at Urbana-Champaign, 132

University of Maryland - College Park, 133

Waverly Light & Power, 163

Westinghouse Electric Corporation, 164

Wisconsin Public Service Corporation, 165

ENERGY EFFICIENCY/ENERGY CONSERVATION

Air & Waste Management Association, 1

Alliance to Save Energy, The, 2

American Council for an Energy-Efficient Economy (ACEEE), 7

American Forest Foundation, 8

American Nuclear Society, 10

American Public Power Association, 13

Apple Computer, Inc., 17

Arizona Department of Commerce, Energy Office, 18

Baltimore Gas and Electric Company (BGE), 21

Bronx Zoo/Wildlife Conservation Park, 23



Bullfrog Films, 24

California Energy Commission, 25

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Charles Edison Fund, 30

City Public Service, 32

City Utilities of Springfield, 33

Cobblestone Publishing, 34

Culver Company, 37

Dayton Power & Light Company, 38

Denver Earth Science Project, 39

Disney Educational Productions, 40

E2: Environment & Education, 42

Earth Foundation, 43

Edison Electric Institute (EEI), 45

Educational Development Specialists, 47

Energy Source Education Council, 48

Enterprise for Education, Inc., 49

Environmental Hazards Management Institute (EHMI), 50 EV Media, 51

Exxon Company, U.S.A., 52

Flexible Packaging Educational Foundation, 53

Florida Energy Office, 54

Florida Power & Light Company, 55

Florida Solar Energy Center (FSEC), 56

General Atomics Sciences Education Foundation, 59

GPU Energy, 62

Hawaiian Electric Company, Inc., 63

Houston Lighting & Power Company, 64

Indiana Department of Education, 67

Integrated Waste Services Association, 69

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Kissimmee Utility Authority (KUA), 74

Midwest Renewable Energy Association, 76

Mineral Information Institute (MII), 77

 $\frac{C}{107}$ 115

Minnesota Department of Public Service, 78

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Rural Electric Cooperative Association, 91

National Science Teachers Association, 94

National Wildlife Federation, 95

NoodleHead Network, The, 98

Northeast Utilities, 99

Northern Indiana Public Service Company, 100

Northern States Power Company, 101

Nuclear Information and Resource Service, 103

OG&E Electric Services, 104

Pacific Gas & Electric Company, 108

Pennsylvania Power & Light Co., 109

Plastic Bag Association, 110

Radon Group, Ltd., The, 113

Railroad Commission of **Texas**, 114

116

Safe Energy Communication Council, 117

Science Screen Report, 118

Science Service, 119

Simon & Schuster Children's Publishing Division, 121

Smith College, 123

Solar Energy Industries Association, 124

Solar Now, 125

Steel Recycling Institute, 126

Troll School and Library L.L.C., 128

U.S. Consumer Information Center, 134

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Bonneville Power Administration, 141

Clean Cities Hotline, 143

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

National Alternative Fuels Hotline, 148

National Energy Information Center (NEIC), 149

National Renewable Energy Laboratory, 151

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

Southwestern Power Administration, 156

Western Area Power Administration, 157

U.S. Environmental Protection Agency (EPA), 160

University of Florida, 131

University of Illinois at Urbana-Champaign, 132

Videodiscovery, Inc., 161

Waverly Light & Power, 163

Wisconsin Public Service Corporation, 165

ENVIRONMENT

Air & Waste Management Association, 1

Alliance to Save Energy, The, 2

American Chemical Society, 5

American Council for an Energy-Efficient Economy (ACEEE), 7

American Forest Foundation, 8

American Geological Institute, 9

🔾 __can Nuclear Society, 10

American Petroleum Institute, 11

American Plastics Council, 12

Arizona Department of Commerce, Energy Office, 18

Aseptic Packaging Council, The, 19

Baltimore Gas and Electric Company (BGE), 21

Bronx Zoo/Wildlife Conservation Park, 23

Bullfrog Films, 24

California Energy Commission, 25

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Charles Edison Fund, 30

Chlorine Chemistry Council, The (CCC), 31

City Public Service, 32

Cobblestone Publishing, 34

Colorado School of Mines, 35

Consumer Aerosol Products Council, The, 36

Culver Company, 37

Dayton Power & Light Company, 38

Denver Earth Science Project, 39

117

Disney Educational Productions, 40

DuPont, 41

E2: Environment & Education, 42

Earth Foundation, 43

East Ohio Gas, 44

Edison Electric Institute (EEI), 45

Educational Development Specialists, 47

Enterprise for Education, Inc., 49

Environmental Hazards Management Institute (EHMI), 50

EV Media, 51

Exxon Company, U.S.A., 52

Flexible Packaging Educational Foundation, 53

Florida Energy Office, 54

Florida Power & Light Company, 55

Foodservice & Packaging Institute, Inc., 57

Frey Scientific, 58

General Atomics Sciences Education Foundation, 59

Geothermal Education Office, 60

Global Issues Resource Center, 61

Energy, 62

Hawaiian Electric Company, Inc., 63

Houston Lighting & Power Company, 64

Indiana Department of Education, 67

Institute for Chemical Education, The (ICE), 68

Integrated Waste Services Association, 69

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Keep America Beautiful, Inc., 72

Kids for A Clean Environment, 73

Kissimmee Utility Authority (KUA), 74

Learning Works, The, 75

National Aeronautics and Space Administration (NASA), 79

National Arbor Day Foundation, 80

National Association of Conservation Districts, 81

National Corn Growers Association, 82

National Cotton Council of America, 83

National Energy Education Development Project (NEED), 84

118

National Energy Foundation, 85

National Geographic Society, 86

National Network of Energy and Environmental Education Professionals, 89

National Science Foundation, 92

National Science Resources Center (NSRC), 93

National Science Teachers Association, 94

National Wildlife Federation, 95

NoodleHead Network, The, 98

Northern Indiana Public Service Company, 100

Northern States Power Company, 101

Nuclear Energy Institute, 102

Nuclear Information and Resource Service, 103

OG&E Electric Services, 104

Pacific Gas & Electric Company, 108

Pennsylvania Power & Light Co., 109

Plastic Bag Association, 110

Polystyrene Packaging Council, 111

Procter & Gamble, 112

Railroad Commission of Texas, 114

Renew America, 116

Renewable Fuels Association, 115

Safe Energy Communication Council, 117

Science Screen Report, 118

Science Service, 119

Simon & Schuster Children's Publishing Division, 121

Solar Now, 125

Steel Recycling Institute, 126

Troll School and Library L.L.C., 128

U.S. Consumer Information Center, 134

U.S. Department of Agriculture

Forest Service, 135

U.S. Department of Commerce

National Oceanic & Atmospheric Administration, 136

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

Office of Educational Research & Improvement (OERI), 138

U.S. Department of Energy

Biofuels Feedstock Development Program, 140

Bonneville Power Administration, 141

Carbon Dioxide Information Analysis Center (CDIAC), 142

Clean Cities Hotline, 143

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

Federal Energy Technology Center - Pittsburgh, 146

Los Alamos National Laboratory, 147

National Alternative Fuels Hotline, 148

Office of Civilian Radioactive Waste Management, 152

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

Minerals Management Service (MMS), 159

U.S. Environmental Protection Agency (EPA), 160

ERIC ENILONE PROVIDENCE PRICE

Union of Concerned Scientists, 129

University of California - Los Angeles, 130

Videodiscovery, Inc., 161

Waverly Light & Power, 163

Wisconsin Public Service Corporation, 165

GEOSCIENCES/EARTH SCIENCES

Air & Waste Management Association, 1

Alliance to Save Energy, The, 2

American Geological Institute, 9

American Petroleum Institute, 11

Bronx Zoo/Wildlife Conservation Park, 23

Bullfrog Films, 24

California Foundation for Agriculture in the Classroom, 26

Center for Energy and Economic Development (CEED), The, 27

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

City Public Service, 32

Cobblestone Publishing, 34

Colorado School of Mines, 35

Consumer Aerosol Products Council, The, 36

Denver Earth Science Project, 39

Disney Educational Productions, 40

East Ohio Gas, 44

Enterprise for Education, Inc., 49

Frey Scientific, 58

General Atomics Sciences Education Foundation, 59

Geothermal Education Office, 60

GPU Energy, 62

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Mineral Information Institute (MII), 77

National Aeronautics and Space Administration (NASA), 79

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Science Teachers Association, 94

National Wildlife Federation, 95

New York State Geological Survey, 97

Pennsylvania Power & Light Co., 109

Railroad Commission of Texas, 114

Science Screen Report, 118

Science Service, 119

Simon & Schuster Children's Publishing Division, 121

SME, 122

Troll School and Library L.L.C., 128

U.S. Department of Commerce

National Oceanic & Atmospheric Administration, 136

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

Office of Educational Research & Improvement (OERI), 138

U.S. Department of Energy

Carbon Dioxide Information Analysis Center (CDIAC), 142

Federal Energy Technology Center - Morgantown, 145

Office of Fossil Energy, 153



Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

Minerals Management Service (MMS), 159

Videodiscovery, Inc., 161

NATURAL GAS

Alliance to Save Energy, The, 2

American Nuclear Society, 10

Baltimore Gas and Electric Company (BGE), 21

Channing L. Bete Publishing Co., Inc., 29

City Public Service, 32

Culver Company, 37

Dayton Power & Light Company, 38

Denver Earth Science Project, 39

East Ohio Gas, 44

Educational Development Specialists, 47

Energy Source Education Council, 48

Enterprise for Education, Inc., 49

Independent Petroleum

o iation of America, 66

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Kissimmee Utility Authority (KUA), 74

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Science Teachers Association, 94

Natural Gas Vehicle Coalition, The, 96

New York State Geological Survey, 97

Northern Indiana Public Service Company, 100

Ohio Oil & Gas Association, 105

Oklahoma Energy Resources Board, 106

Pennsylvania Power & Light Co., 109

Railroad Commission of Texas, 114

U.S. Department of Agriculture

Forest Service, 135

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137 U.S. Department of Energy

Clean Cities Hotline, 143

Federal Energy Technology Center - Morgantown, 145

Federal Energy Technology Center - Pittsburgh, 146

National Alternative Fuels Hotline, 148

National Energy Information Center (NEIC), 149

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Minerals Management Service (MMS), 159

Wisconsin Public Service Corporation, 165

NUCLEAR ENERGY

American Nuclear Society, 10

Baltimore Gas and Electric Company (BGE), 21

Bullfrog Films, 24

Channing L. Bete Publishing Co., Inc., 29

Charles Edison Fund, 30

City Public Service, 32

on Electric Institute (EEI), 45

Enterprise for Education, Inc., 49

Florida Power & Light Company, 55

Frey Scientific, 58

General Atomics Sciences Education Foundation, 59

Global Issues Resource Center, 61

GPU Energy, 62

Houston Lighting & Power Company, 64

Johnson Controls, Inc., 71

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Science Teachers Association, 94

Northeast Utilities, 99

Northern States Power Company, 101

Nuclear Energy Institute, 102

Nuclear Information and Resource Service, 103

Pennsylvania Power & Light Co., 109

Radon Group, Ltd., The, 113

Safe Energy Communication Council, 117

123

Smith College, 123

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Los Alamos National Laboratory, 147

National Energy Information Center (NEIC), 149

National Low-Level Waste Management Program, 150

Office of Nuclear Energy, Science and Technology, 154

Office of Scientific and Technical Information, 155

Union of Concerned Scientists, 129

Westinghouse Electric Corporation, 164

Wisconsin Public Service Corporation, 165

PETROLEUM

Alliance to Save Energy, The, 2

American Association for Vocational Instructional Materials, 4

American Geological Institute, 9

American Petroleum Institute, 11

BP America, 22

California Energy Commission, 25

Channing L. Bete Publishing Co., Inc., 29

Denver Earth Science Project, 39

Earth Foundation, 43

Enterprise for Education, Inc., 49

Exxon Company, U.S.A., 52

Independent Petroleum Association of America, 66

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Mineral Information Institute (MII), 77

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Propane Gas Association, 90

National Science Teachers Association, 94

New York State Geological Survey, 97

Ohio Oil & Gas Association, 105

Oklahoma Energy Resources Board, 106

ERIC Full fext Provided by ERIC

Pennsylvania Power & Light Co., 109

Railroad Commission of Texas, 114

Shell Oil Company, 120

U.S. Department of Agriculture

Forest Service, 135

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Federal Energy Technology Center - Morgantown, 145

Federal Energy Technology Center - Pittsburgh, 146

National Alternative Fuels Hotline, 148

National Energy Information Center (NEIC), 149

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

Minerals Management Service (MMS), 159

RECYCLING

Air & Waste Management Association, 1

Aluminum Association, Inc., The, 3

American Chemical Society, 5

American Forest Foundation, 8

American Nuclear Society, 10

American Petroleum Institute, 11

American Plastics Council, 12

Arizona Department of Commerce, Energy Office, 18

Aseptic Packaging Council, The, 19

Bronx Zoo/Wildlife Conservation Park, 23

Bullfrog Films, 24

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Cobblestone Publishing, 34

Consumer Aerosol Products Council, The, 36

Dayton Power & Light Company, 38

Disney Educational Productions, 40



Educational Development Specialists, 47

Environmental Hazards Management Institute (EHMI), 50

Flexible Packaging Educational Foundation, 53

Foodservice & Packaging Institute, Inc., 57

Frey Scientific, 58

Global Issues Resource Center, 61

GPU Energy, 62

Hawaiian Electric Company, Inc., 63

Indiana Department of Education, 67

Integrated Waste Services Association, 69

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Keep America Beautiful, Inc., 72

Kissimmee Utility Authority (KUA), 74

Learning Works, The, 75

Mineral Information Institute (MII), 77

National Energy Education Development Project (NEED), 84

nal Geographic Society, 86

National Science Resources Center (NSRC), 93

National Science Teachers Association, 94

National Wildlife Federation, 95

NoodleHead Network, The, 98

Northern Indiana Public Service Company, 100

Northern States Power Company, 101

OG&E Electric Services, 104

Pennsylvania Power & Light Co., 109

Plastic Bag Association, 110

Polystyrene Packaging Council, 111

Procter & Gamble, 112

Science Screen Report, 118

Simon & Schuster Children's Publishing Division, 121

Steel Recycling Institute, 126

Troll School and Library L.L.C., 128

U.S. Consumer Information Center, 134

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

RENEWABLE ENERGY

Air & Waste Management Association, 1

American Chemical Society, 5

American Forest Foundation, 8

American Nuclear Society, 10

American Solar Energy Society, 14

American Wind Energy Association, 16

Arizona Department of Commerce, Energy Office, 18

Bronx Zoo/Wildlife Conservation Park, 23

Bullfrog Films, 24

California Energy Commission, 25

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

City Public Service, 32

Enterprise for Education, Inc., 49

Florida Energy Office, 54

Florida Solar Energy Center (FSEC), 56

Geothermal Education Office, 60

GPU Energy, 62

Hawaiian Electric Company, Inc., 63

Houston Lighting & Power Company, 64

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Midwest Renewable Energy Association, 76

Minnesota Department of Public Service, 78

National Arbor Day Foundation, 80

National Corn Growers Association, 82

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Hydropower Association, The, 87

National Science Teachers Association, 94



National Wildlife Federation, 95

Northeast Utilities, 99

Nuclear Energy Institute, 102

Nuclear Information and Resource Service, 103

Pennsylvania Power & Light Co., 109

Radon Group, Ltd., The, 113

Renewable Fuels Association, 115

Safe Energy Communication Council, 117

Science Screen Report, 118

Solar Energy Industries Association, 124

Solar Now, 125

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Biofuels Feedstock Development Program, 140

Bonneville Power Administration, 141

Clean Cities Hotline, 143

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144 Los Alamos National Laboratory, 147

National Alternative Fuels Hotline, 148

National Energy Information Center (NEIC), 149

National Renewable Energy Laboratory, 151

Office of Fossil Energy, 153

Office of Scientific and Technical Information, 155

Western Area Power Administration, 157

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

Union of Concerned Scientists, 129

Videodiscovery, Inc., 161

Waverly Light & Power, 163

Wisconsin Public Service Corporation, 165

WASTE MANAGEMENT

Air & Waste Management Association, 1

American Forest Foundation, 8

American Nuclear Society, 10

American Plastics Council, 12

Bullfrog Films, 24



128

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Dayton Power & Light Company, 38

Educational Development Specialists, 47

Enterprise for Education, Inc., 49

Environmental Hazards Management Institute (EHMI), 50

Flexible Packaging Educational Foundation, 53

Florida Power & Light Company, 55

Foodservice & Packaging Institute, Inc., 57

Integrated Waste Services Association, 69

Johnson Controls, Inc., 71

Keep America Beautiful, Inc., 72

National Energy Education Development Project (NEED), 84

National Geographic Society, 86

National Science Teachers Association, 94

National Wildlife Federation, 95

Northern States Power any, 101 Nuclear Energy Institute, 102

Nuclear Information and Resource Service, 103

Pennsylvania Power & Light Co., 109

Plastic Bag Association, 110

Polystyrene Packaging Council, 111

Steel Recycling Institute, 126

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

Federal Energy Technology Center - Morgantown, 145

National Low-Level Waste Management Program, 150

Office of Civilian Radioactive Waste Management, 152

Office of Scientific and Technical Information, 155

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

129

WATER

Air & Waste Management Association, 1

American Association for Vocational Instructional Materials, 4

American Chemical Society, 5

American Geological Institute, 9

American Petroleum Institute, 11

American Water Works Association, 15

Bullfrog Films, 24

Center for Renewable Energy and Sustainable Technology (CREST), 28

Channing L. Bete Publishing Co., Inc., 29

Chlorine Chemistry Council, The (CCC), 31

Colorado School of Mines, 35

Culver Company, 37

Denver Earth Science Project, 39

Disney Educational Productions, 40

Educational Development Specialists, 47

Enterprise for Education, Inc., 49

Environmental Hazards nagement Institute (EHMI), 50

Frey Scientific, 58

Geothermal Education Office, 60

Jacksonville Electric Authority (JEA), 70

Johnson Controls, Inc., 71

Kissimmee Utility Authority (KUA), 74

National Association of Conservation Districts, 81

National Energy Education Development Project (NEED), 84

National Energy Foundation, 85

National Geographic Society, 86

National Hydropower Association, The, 87

National Science Teachers Association, 94

National Wildlife Federation, 95

Pennsylvania Power & Light Co., 109

Radon Group, Ltd., The, 113

Simon & Schuster Children's Publishing Division, 121

U.S. Consumer Information Center, 134

U.S. Department of Agriculture

Forest Service, 135

130

U.S. Department of Education

ERIC Clearinghouse for Science, Mathematics, and Environmental Education, 137

U.S. Department of Energy

Energy Efficiency and Renewable Energy Clearinghouse (EREC), 144

Los Alamos National Laboratory, 147

U.S. Department of the Interior

Bureau of Land Management (BLM), 158

University of Illinois at Urbana-Champaign, 132

Videodiscovery, Inc., 161

Water Environment Federation, 162



Energy Information Administration U.S. Department of Energy Forrestal Building, El-30 Washington, DC 20585

OFFICIAL BUSINESS

STANDARD MAIL A U.S. POSTAGE PAID MERRIFIELD, VA PERMIT NO. 1635

Address Correction Requested





U.S. DEPARTMENT OF EDUCATION

Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

